

VRF



Contents

AIRSTAGE creates a comfortable space with a wide range of series variations.

Comfort is required of spaces where people gather.

VRF is a large multi system that effectively air conditions a wide range of spaces from large buildings to personal residences.

This system makes a variety of spaces comfortable utilizing high environmental performance and powerful but pleasant operation.

076 **AIRSTAGE J** Heat pump type

084 **AIRSTAGE S** Heat recovery type

088 **AIRSTAGE V** Heat pump type

102 **AIRSTAGE V-II** Heat pump type

120 **Control Systems**



AIRSTAGE J



AIRSTAGE S



AIRSTAGE V



2008 New Model
AIRSTAGE V-II series

THE POSSIBILITIES ARE INFINITE **FUJITSU**



AIRSTAGE™



Variable Refrigerant Flow system For Home & Buildings

FUJITSU GENERAL LIMITED

Compact VRF System for use in apartments, homes, shops, offices and a broad range of other applications

Heat pump
AJYA54LCLR



Economy & Comfort

Powerful operation with low electricity consumption

Excellent EER/COP are attainable as shown in the table below.

Cooling EER
3.20*

Heating COP
3.40*

*"EER/COP" is the coefficient of performance (=capacity (kW) ÷ input power (kW)).
*EER/COP values are based on our own testing method.

Uses a high-performance DC inverter scroll compressor with variable capacity according to the load during cooling and heating.



Low noise design

Newly designed larger fan and double casing bell mouth construction reduce noise emissions.

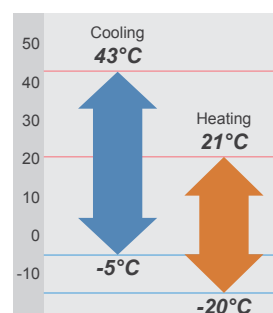
Large fan
Low speed design suppresses noise by using a larger fan.



Double casing bell mouth
Double casing bell mouth helps to reduce noise.

Wide operating range

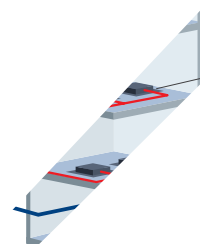
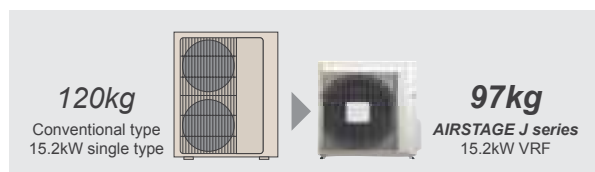
Outdoor unit operates over an ambient temperature range of -5°C to 43°C for cooling and -20°C to 21°C for heating.



Design Versatility

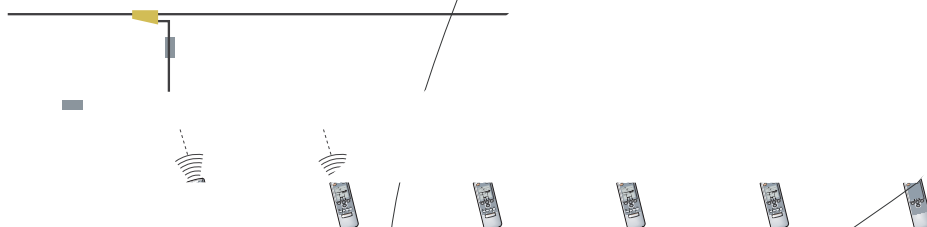
Compact design

Small, compact casing can be easily concealed. The low overall height allows the unit to be neatly positioned beneath a window.



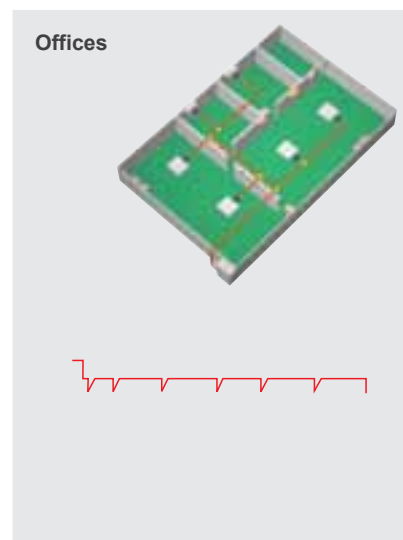
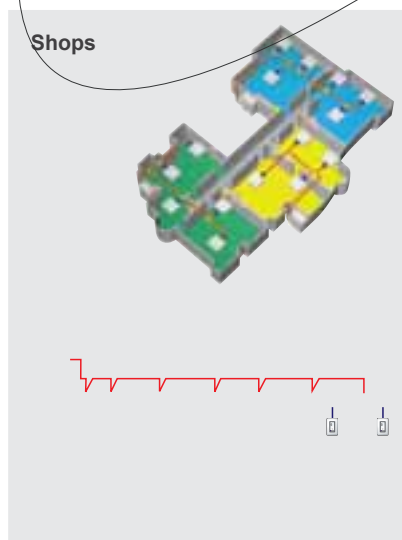
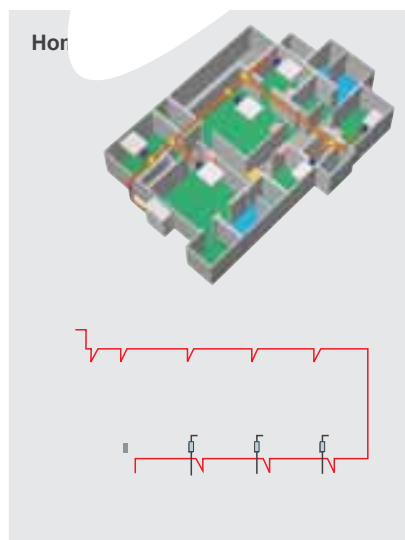
High capacity connection

- Up to 8 indoor units can be connected to 1 outdoor unit. Furthermore, the indoor connection capacity can be up to 150% of the outdoor unit rating. This increases flexibility.
- All indoor units are supplied with a Wireless Remote Controller.



System

Dual air conditioning of multiple rooms

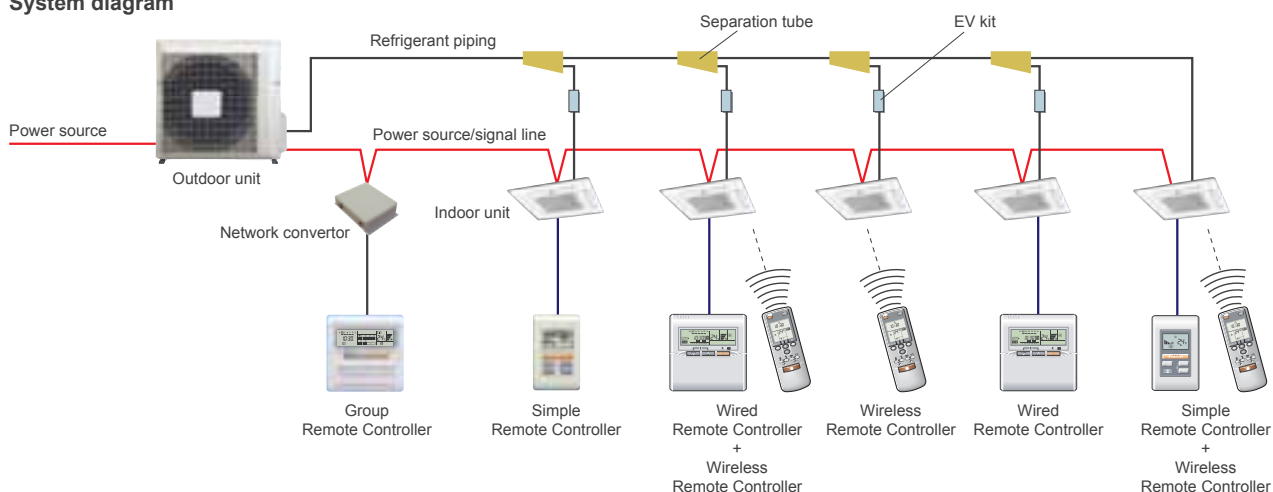


Easy Installation

Simple piping system

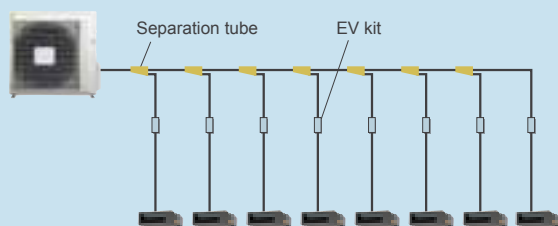
The wiring work is simple in the connection wiring system one by one. The dedicated communication line is unnecessary. The electrical work is simple because of single-phase power supply.

System diagram

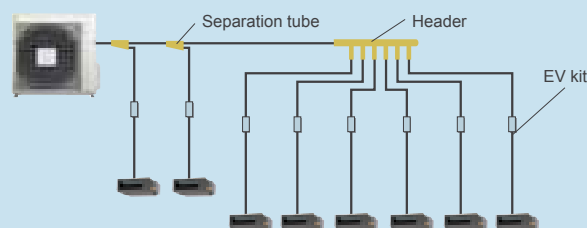


Piping connection examples

Separation tube system

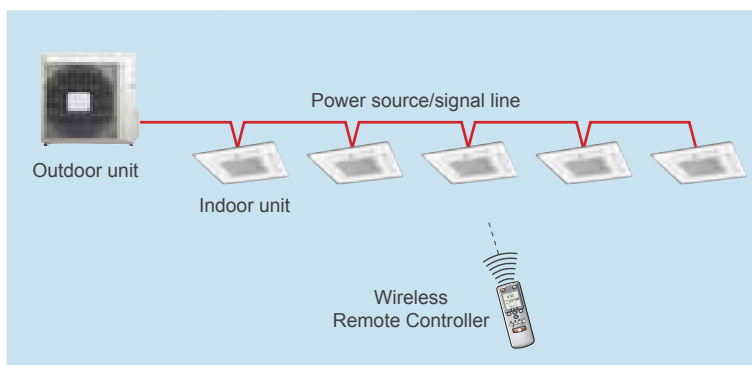


Separation tube + header system



Easy system address setting

During installation work, system addressing can be performed using the wireless remote controller, thus eliminating manual switch setting.

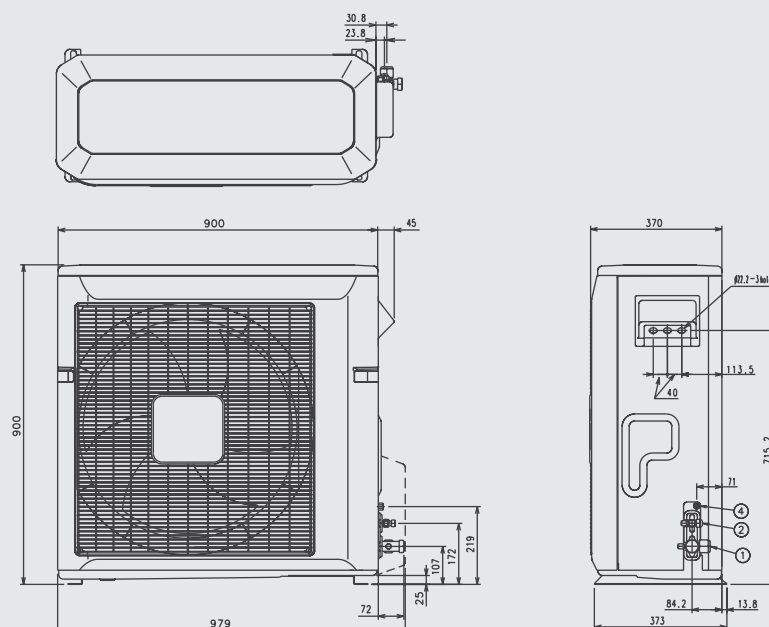


Outdoor units specifications

Dimensions

Model: AJYA54LCLR

(Unit : mm)



Specifications

Rating Capacity range		HP		6	
Model name				AJYA54LCLR	
Maximum Connectable Indoor Unit				8	
Indoor unit connectable capacity	Cooling	kW	7.6 to 22.8		
Power source				Single-phase, 220-240V, 50Hz	
Capacity	Cooling	kW	15.2		
	Heating		16.6		
Input power	Cooling	kW	4.75		
	Heating		4.88		
EER	Cooling	W/W	3.2		
COP	Heating		3.4		
Air flow rate		High	m³/h	5,250	
Sound pressure level	Normal operation mode		dB	56	
	Silent operation mode		(A)	51	
Compressor motor output		kW	3.0		
Heat exchanger fin				Plate fin coil	
Dimensions	Height	mm	900		
	Width	mm	900		
	Depth	mm	370		
Weight		kg	97		
Refrigerant charge		kg	3.0		
Connection pipe diameter	Liquid	mm	ø9.52		
	Gas		ø19.05		
Operation range	Cooling	°C	-5 to 43		
	Heating		-20 to 21		

















Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).













Heating: Indoor temperature 20°CDB/(15°CWB), and outdoor temperature 7°CDB/6°CWB.

Voltage: 230 [V]

Indoor units lineup

Capacity range (kW)	2.15	2.80	3.60	4.00	5.30	5.70	
Model code	7	9	12	14	18	20	
Compact Cassette	 AU7UFAAR	 AU9UFAAR	 AU12UFAAR	 AU14UFAAR	 AU18UFAAR		
<small>Slim Type</small> Cassette						 AU20UFARR	
Compact Duct	 ARXA07LALR	 ARXA09LALR	 ARXA12LALR	 ARXA14LALR	 ARXA18LALR		
Duct							
Compact Wall Mounted	 AS7UFADR	 AS9UFADR	 AS12UFADR	 AS14UFADR			
Wall Mounted					 AS18UFAJR		

6 Types, 28 Models, Capacity range from 2.15kW to 14.1kW

	6.00 22	6.90 24	7.05 25	8.80 30	10.5 36	12.7 45	14.1 54
			 Slim Type AU25UFARR	 Slim Type AU30UFARR	 AU36UFASR	 AU45UFASR	 AU54UFASR
 ARXA22LBLR							
			 AR25UFAAR ARXB25LATR	 AR30UFAAR ARXB30LATR	 AR36UFAAR	 AR45UFAAR	
		 AS24UFAJR		 AS30UFAJR			

Indoor units specifications

Compact Cassette



Model name			AU7UFAAR	AU9UFAAR	AU12UFAAR	AU14UFAAR	AU18UFAAR	
Power source			220-240V, 50Hz					
Capacity	Cooling	kW	2.15	2.80	3.60	4.00	5.00	
	Heating		2.45	3.10	4.10	4.50	5.45	
Input power		W	28		52	50		
Airflow rate	High	m³/h	530		580	640		
	Med		480		520	540		
	Low		410		460	470		
Sound pressure level	High	dB(A)	38		41	44		
	Med		35		37	38		
	Low		31		34	35		
Dimensions (H x W x D)		Net	230 x 570 x 570					
Weight		Net	18					
Connection pipe diameter	Liquid (Flare)	mm	ø9.52		ø6.35		ø12.70	ø15.88
	Gas (Flare)							
	Drain		ø32 (I.D.): ø37 (O.D.)					

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

Cassette



Model name			AU20UFARR	AU25UFARR	AU30UFARR	AU36UFASR	AU45UFASR	AU54UFASR
Power source			220-240V, 50Hz					
Capacity	Cooling	kW	5.70	7.05	8.80	10.5	12.7	14.1
	Heating		5.80	7.85	9.10	10.7	13.7	15.8
Input power		W	117	129	142	175	190	219
Airflow rate	High	m³/h	1,030	1,170	1,270	1,500	1,650	1,780
	Med		850	970	1,070	1,300	1,450	1,550
	Low		680	770	880	1,100	1,200	1,300
Sound pressure level	High	dB(A)	42	42	45	48	49	52
	Med		38	40	42	44	47	49
	Low		37	39	39	41	43	45
Dimensions (H x W x D)		Net	246 x 830 x 830			296 x 830 x 830		
Weight		Net	34			40		
Connection pipe diameter	Liquid (Flare)	mm	ø6.35			ø9.52		
	Gas (Flare)		ø15.88			ø19.05		
	Drain		ø32 (I.D.); ø37 (O.D.)					

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

Duct



Model name			ARXA07 LALR	ARXA09 LALR	ARXA12 LALR	ARXA14 LALR	ARXA18 LBLR	ARXA22 LBLR	ARXB25 LATR	ARXB30 LATR	AR25 UFAAR	AR30 UFAAR	AR36 UFAAR	AR45 UFAAR
Power source			220-240V, 50Hz											
Capacity	Cooling	kW	2.15	2.80	3.50	4.00	5.30	6.00	7.05	8.80	7.05	8.80	10.5	12.7
	Heating		2.45	3.10	4.10	4.80	5.60	6.30	7.85	9.10	7.85	9.10	10.7	13.7
Input power		W	32		49		77		155		155		315	
Airflow rate	High	m³/h	420		620		890		1,340		1,200		2,200	
	Med		390		550		840		1,090		1,100		2,000	
	Low		360		470		780		970		1,000		1,800	
Static pressure range		Pa	0 to 40						0 to 80		30 to 160		30 to 180	
Sound pressure level	High	dB(A)	34		33		42		33		44		49	
	Med		32		29		41		29		42		47	
	Low		31		27		38		26		40		45	
Dimensions (H x W x D)		Net	mm		217 x 663 x 595		217 x 953 x 595		270 x 1,210 x 700					
Weight		Net	kg		18		25		43			45		
Connection pipe diameter	Liquid (Flare)	mm	ø6.35						ø9.52		ø6.35		ø9.52	
	Gas (Flare)		ø9.52		ø12.70		ø15.88						ø19.05	
	Drain		ø21.5 (I.D.): ø26 (O.D.)						ø35.7 (I.D.): ø38.1 (O.D.)					

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Standard static pressure: 0Pa (AR7 to AR22), 100Pa (AR25 to AR45).

Voltage: 230[V]

Wall Mounted



Model name			AS7UFADR	AS9UFADR	AS12UFADR	AS14UFADR	AS18UFAJR	AS24UFAJR	AS30UFAJR				
Power source			220-240V, 50Hz										
Capacity	Cooling	kW	2.15	2.80	3.50	3.80	5.40	6.90	8.00				
	Heating		2.45	3.10	4.10	4.50	5.60	7.80	8.80				
Input power		W	26	33	40	38	50	60					
Airflow rate	High	m³/h	410	500	540	840	950	1,050					
	Med		370	450	510	700	800	940					
	Low		350	410	480	600	670	780					
Sound pressure level	High	dB(A)	30	36	39	42	45	48					
	Med		27	33	37	39	41	45					
	Low		26	30	34	35	37	41					
Dimensions (H x W x D)		Net	mm				257 x 808 x 187			320 x 1,120 x 220			
Weight		Net	kg				8			16			
Connection pipe diameter	Liquid (Flare)	mm				ø6.35						ø9.52	
	Gas (Flare)		ø9.52			ø12.70			ø15.88				
	Drain		ø12 (I.D.); ø16.2 - 17 (O.D.)						ø17 (I.D.); ø24 (O.D.)				

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB).

Heating: Indoor temperature 20°CDB/15°CWB, and outdoor temperature 7°CDB/(6°CWB).

Voltage: 230[V]

Maximum comfort from
inbuilt flexibility

Heat recovery
AO90MPCMF



High Efficiency

Operating system

Cooling and heating can be performed simultaneously within the same refrigerant circuit. Energy savings are made by transferring heat between the indoor units when in heat recovery operation.

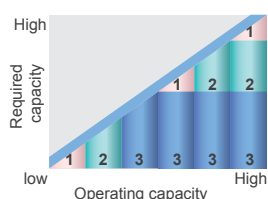
Cooling EER
2.98*

Heating COP
3.15*

*EER/COP values are base on our own testing method.

Smooth operation delivering high efficiencies

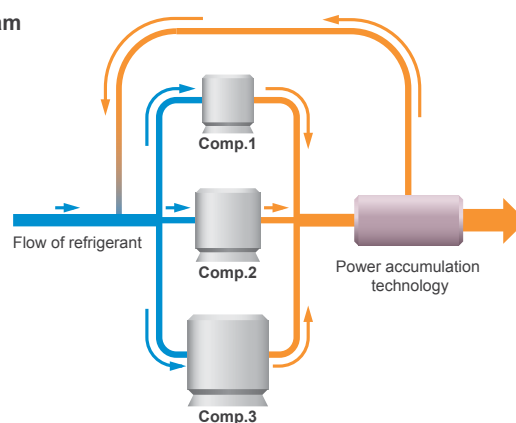
The configuration of 3 constant speed compressors with differing capacities and power accumulation technology ensure smooth step changes and highly efficient operation.



Power accumulation technology

Flow rate to the indoor unit(s) is controlled through the use of 3 differently rated compressors operating in a sequential step arrangement. While power accumulation technology controls the circulating load of the refrigerant flow between those steps.

Diagram



Comfortable Operation

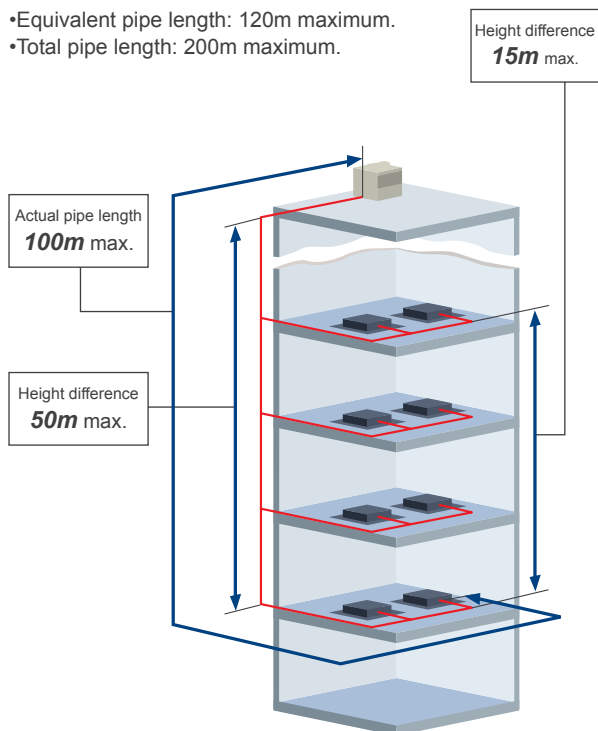
Heat recovery operation

Heat recovery operation is a cooling/heating free operation system, cooling and heating can be performed simultaneously in the same refrigerant system according to user needs. At the moment, the Heat Recovery operation is an extremely superior type that provides a still greater energy saving effect by moving heat between indoor units that are performing the cooling and heating operations. This is by having the compressors act like a pump.

Design Versatility

Long piping system design

- Equivalent pipe length: 120m maximum.
- Total pipe length: 200m maximum.



*When outdoor unit is located above indoor unit. When outdoor unit is located below the indoor unit the height difference is 40m maximum.

High capacity connection

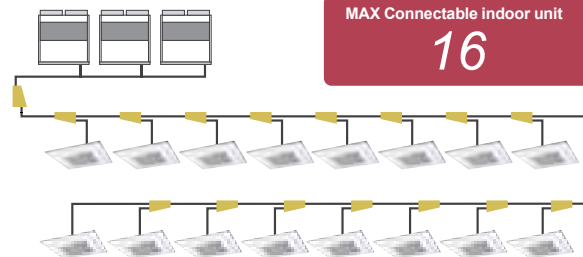
One outdoor unit can control up to 16 indoor units (28kW) of different types and capacities.

Connectable capacity of indoor units for one outdoor unit

50 to 130%

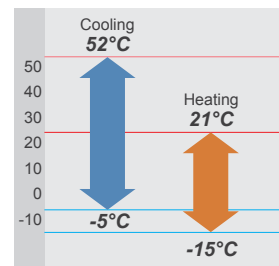
MAX Connectable indoor unit

16



Wide operating range

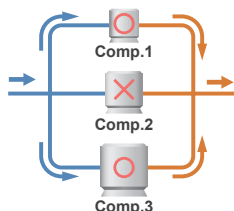
Outdoor unit operates over an outdoor temperature range of -5°C to 52°C for cooling and -15°C to 21°C for heating.



High Reliability

Recovery operation

Outdoor Unit: In the event of compressor failure an alarm is automatically triggered and the remaining compressor(s) will continue to operate, thereby ensuring continuous operation when possible.



Indoor Unit: Each indoor unit operates independently from the others and is, therefore, not affected by a failure within any part of the network.

Oil recovery operation

After a fixed period of time the oil recovery operation automatically returns accumulated oil found in the refrigerant circuit and indoor units.

Improved Comfort

Quiet operation

Operational noise has been reduced yet further through the application of a new dual casing bell-mouth and large fan. When set to silent operation, noise levels can be reduced by 5-6dB(A) compared to normal operation.

Normal operation mode

55dB(A)

Silent operation mode

50dB(A)

(380V)

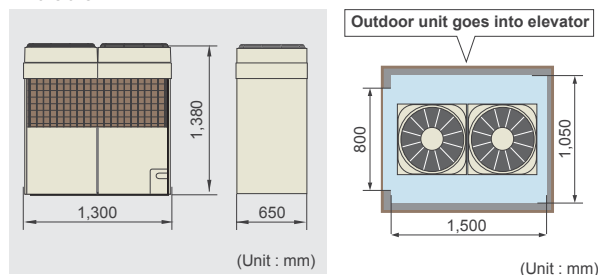
Easy Installation

Space saving

Space saving by setting side by side without space in between.

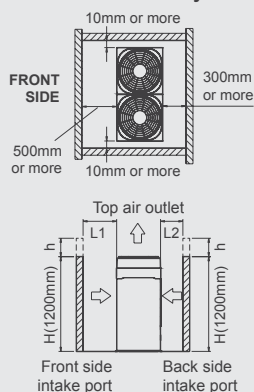
Setting size **5.72** (Unit: m²)

Dimensions

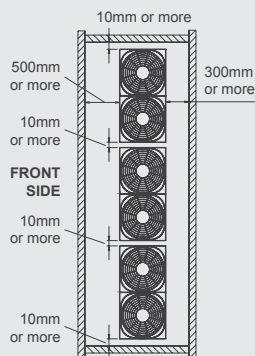


Installation space

For individually



For continuous



There is no height restriction for the side wall.
The height(H) of front and rear wall should be less than 1,200mm.
If the height of wall exceeds 1,200mm by h mm, add h mm to the service space width for L1 and L2.
 $H \leq 1,200 : L1 \geq 500, L2 \geq 300$ $H > 1,200 + h : L1 > 500 + h, L2 > 300 + h$

Easy wiring

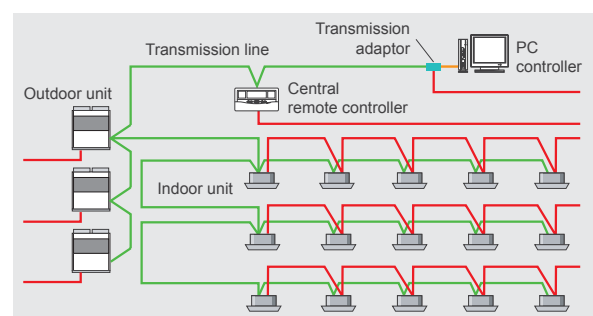
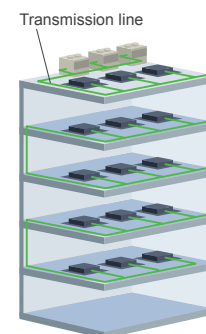
Transmission line:

Non-polar 2-conductor transmission line prevents erroneous wiring.

Power supply wiring:

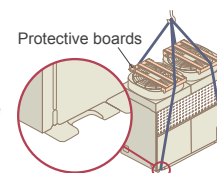
Power supply for outdoor and indoor units is different.

- Outdoor unit
3Ø 4W 380 - 415V 50Hz
- Indoor unit:
1Ø 2W 220 - 240V 50Hz



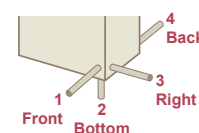
Craning into place

The outdoor unit can be lifted by crane and set down on the building roof.



Four-direction pipe

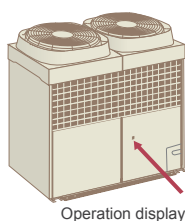
Four-direction piping allows a variety of installation configurations. Easy installation and pipe direction setting.



Easy Maintenance

Operating display

By indicating the operating status and details of failures on a PCB in the outdoor unit, better service and quick and easy maintenance are possible.

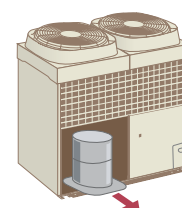


Pump down control

Pump down can be performed from the outdoor unit using the switch on the PCB.

Easy replacement

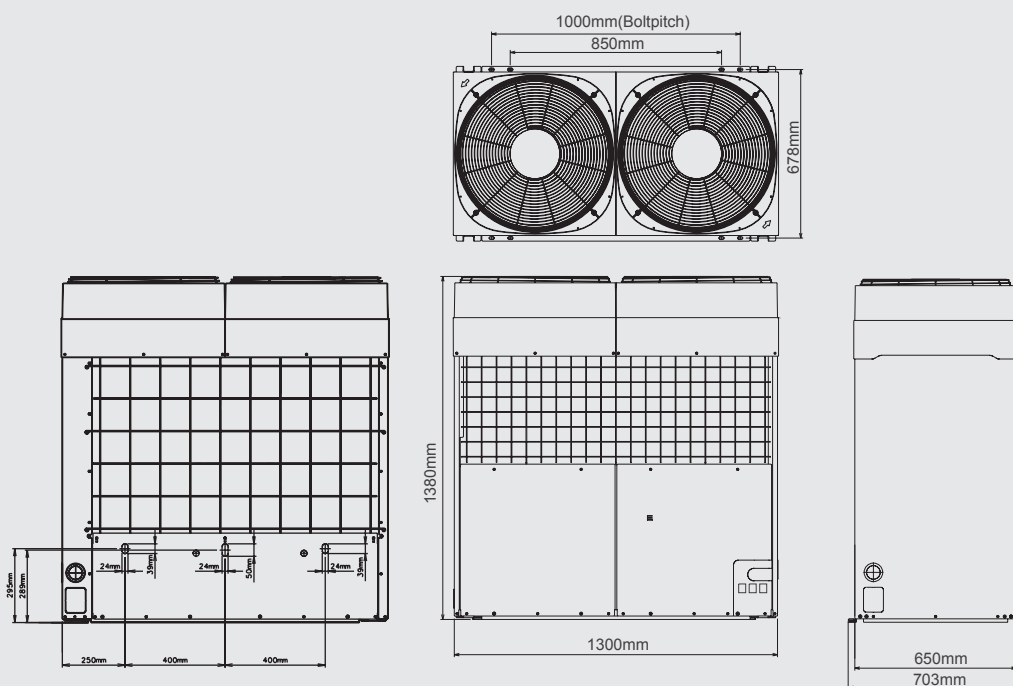
A pull-out plate ensures easy compressor replacement if necessary.



Outdoor units specifications

Dimensions **Model: AO90MPCMF**

(Unit : mm)



Specifications

Rating Capacity range		HP		10	
Model name				AO90MPCMF	
Maximum Connectable Indoor Unit				16	
Indoor unit connectable capacity		Cooling	kW	14 to 36.4	
Power source				3 phase, 380 - 415V, 50Hz	
Capacity		Cooling	kW	28.0	
		Heating		31.5	
Input power		Cooling	kW	9.40	
		Heating		10.0	
EER		Cooling	W/W	2.98	
COP		Heating		3.15	
Air flow rate		High	m³/h	9,800	
Sound pressure level	Normal operation mode		dB (A)	57	
	Silent operation mode			51	
Compressor motor output		kW		1.5 / 3.4 / 5.0	
Heat exchanger fin				Plate fin coil	
Dimensions		Height	mm	1,380	
		Width	mm	1,300	
		Depth	mm	650	
Weight		kg		313	
Refrigerant charge		kg		13	
Connection pipe diameter		Liquid	mm	ø12.70	
		Gas		Discharge Gas ø19.05 / Suction Gas ø28.58	
Operation range		Cooling	°C	-5 to 52	
		Heating		-15 to 21	

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Building air conditioning developed to care for people and their surroundings

Master units

AJYA72LBTF (22.4kW)

AJYA90LBTF (28.0kW)

AJY 126LBTF (40.0kW)

Slave units

AJYA72UBTF (22.4kW)

AJYA90UBTF (28.0kW)

AJY 126UBTF (40.0kW)



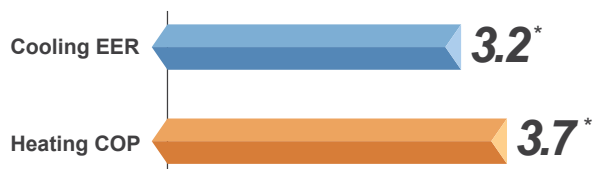
Master units

Slave units

High Efficiency

Higher level of EER/COP

All key features of the outdoor unit result in a higher level of EER/COP



* The data refers to a 10HP outdoor unit.

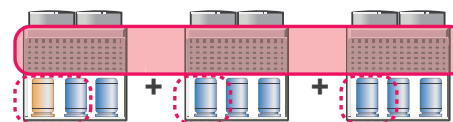
* "EER/COP" is the coefficient of performance [= capacity (kW) ÷ input power (kW)].

* EER/COP values are based on our own testing method.

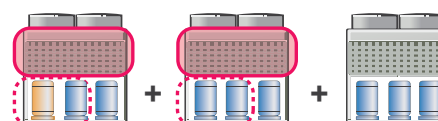
High efficiency operation

The heat exchanger is operated at maximum efficiency by effectively using the heat exchanger of each outdoor unit reciprocally.

Example: The larger heat exchanger than the capacity of a compressor is used in each outdoor unit. (V series)



Conventional method



Energy saving technology



14HP(Master unit)



Large propeller fan: A newly designed fan is adopted for achieving higher performance and reducing the noise level.



Sine-wave DC Inverter Control: By adopting Sine-Wave DC Inverter Control for smoothing the motor running, energy saving and high efficiency operation are realized

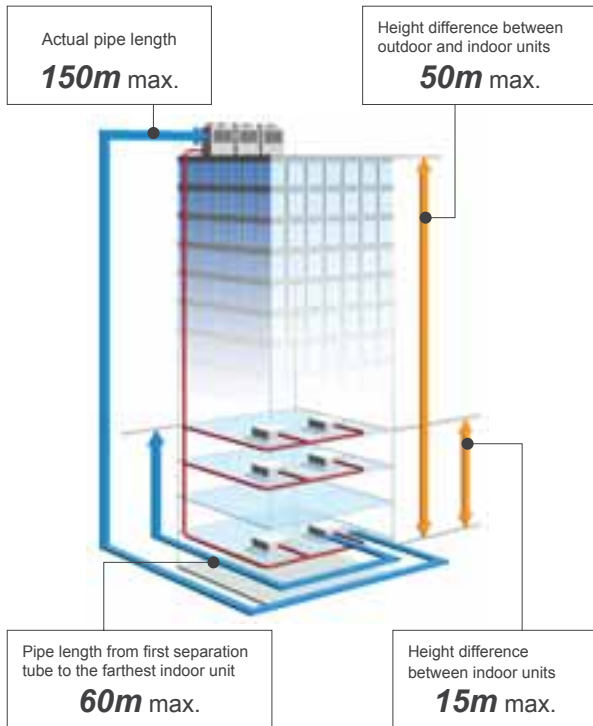


DC inverter + Scroll compressor: By combining the DC inverter controlled scroll compressor with the constant speed scroll compressor, an operating system of energy saving and high efficiency is realized.

Design Versatility

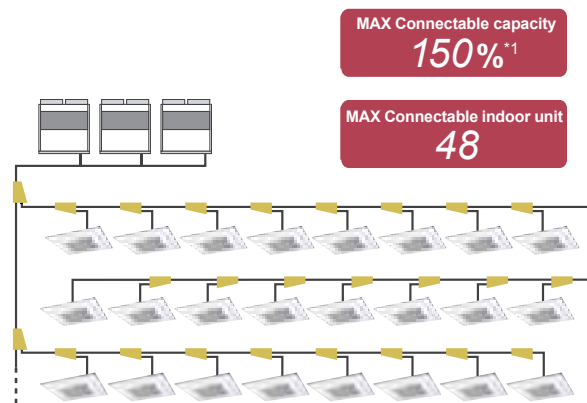
Long piping system design

With the V Series, installation up to a maximum piping length of 150m and a maximum height difference of 50m is possible. In addition, the piping can be extended up to a maximum of 60m from the first separation tube.



High capacity connection

The Indoor unit connection ratio of this system can be from 50 to 150%(*1) of the outdoor unit capacity, thus achieving a high level of diversification with up to 48 indoor units (30 to 42HP) connectable on one refrigerant system.

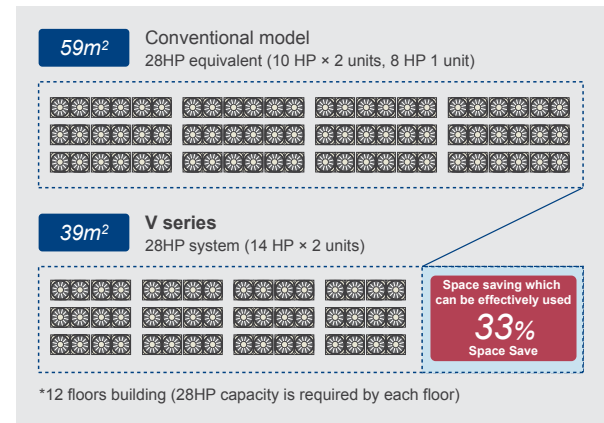


*1. Indoor unit connectable capacity is 75 to 150% for single outdoor unit system (8 - 14HP) in case of including indoor unit model code 18 and under in the system.

Note: When all indoor units are operating at maximum capacity individual indoor units operate at a slightly lower capacity.(When connecting more than 100%)

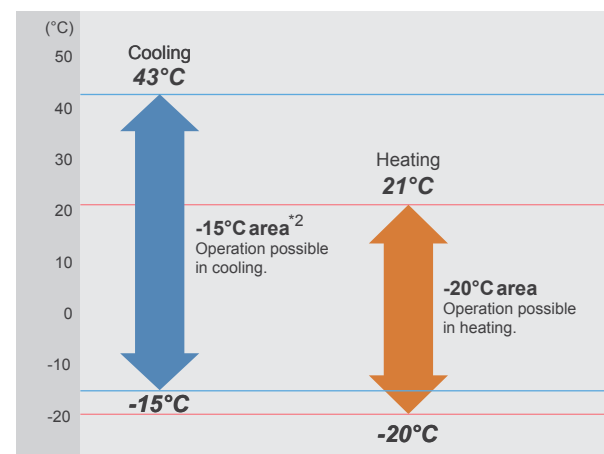
Compact outdoor unit improves effective use of space

Installation space can be reduced freeing up valuable building space



Wide operating ranges

World's top class low outdoor air temperature operating range is achieved. This extends the potential locations for use to the cold regions of the world.

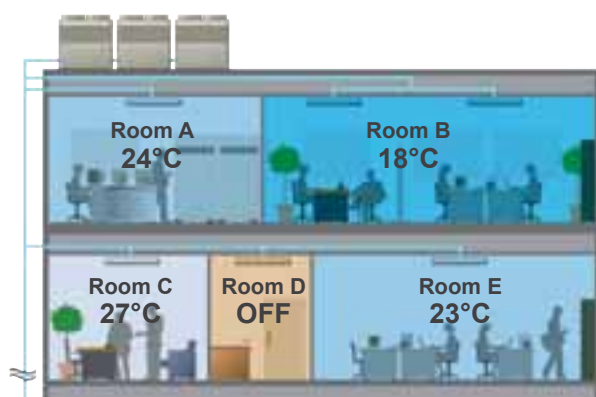


*2. Note : When outdoor units connect multiple, operating range is from -5°C to 43°C in cooling.

Improved Comfort

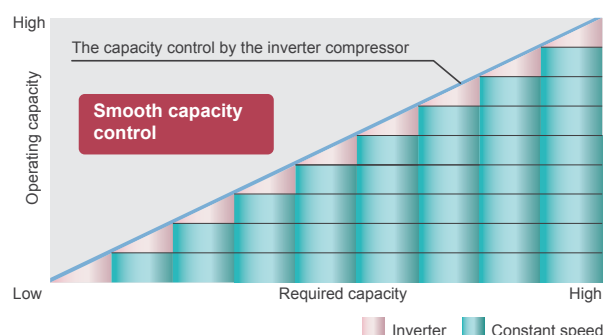
Individual air conditioning system

Pleasant air conditioning meeting individual room requirements.



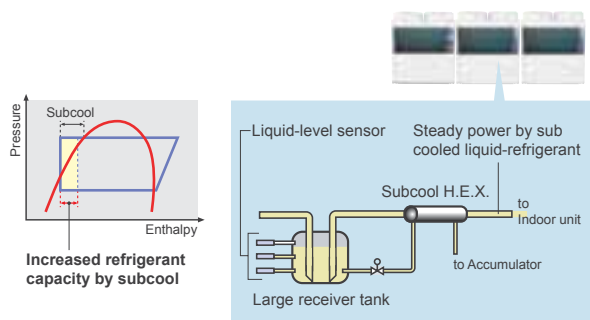
Inverter control

Comfort and energy saving is achieved by the adoption of linear step control in conjunction with inverter and constant speed compressor combination, which allows more precise control of the necessary refrigerant circulation amount required according to the system load. This also allows for a comfortable environment by use of smooth capacity control.



Liquid level balance control

Balancing of the refrigerant in the system is optimized by liquid level balance control and subcool circuit between the receiver tanks of each outdoor unit. Stable refrigerant supply allows long pipe runs and achieves stable operational system performance whilst reducing unpleasant refrigerant noise.



Quiet operation

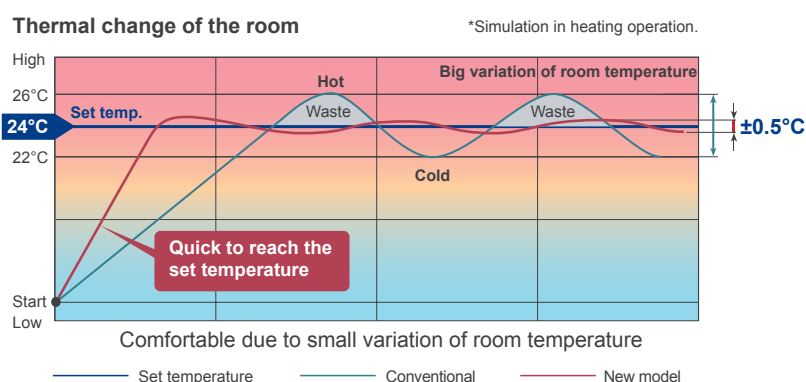
Outdoor unit: Quiet operating sound outdoor unit achieved. Operating noise has been reduced further through the application of a new dual casing bell mouth and large fan. The noise level can be reduced by 4-5dB (A) compared to normal operation by selecting silent operation.

Indoor unit: Quiet indoor units suited for bedrooms and other rooms which require quietness are available.



Room temperature control

High precision $\pm 0.5^\circ\text{C}$ ensures comfortable temperature control of the room. This is achieved by smooth refrigerant flow, controlled by inverter and by the indoor unit electronic expansion valve.

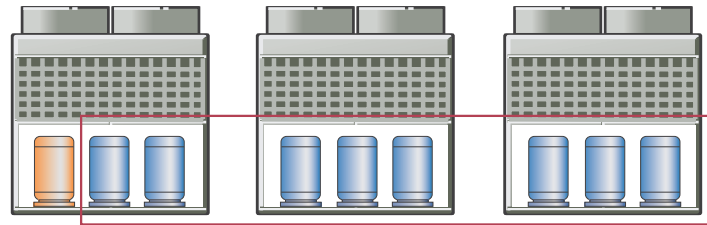


High Reliability

Compressor rotation control

Improvement of long life by reducing compressor wear

In addition to control which reduces the number of times the compressor is started and stopped, the load at starting is shared and equalized by rotation control. This rotation improves the durability and reliability of each compressor.



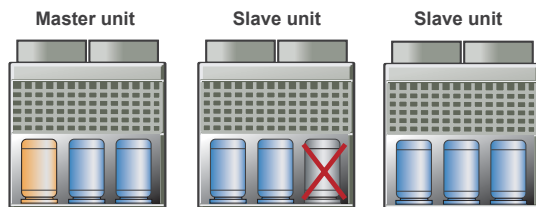
Compressor starting rotation (Constant speed)



Emergency operation

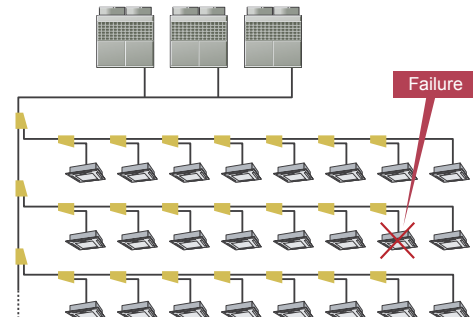
Outdoor unit:

There is no immediate system shutdown if trouble occurs in any compressor. The other compressors continue to operate on an emergency basis.



Indoor unit:

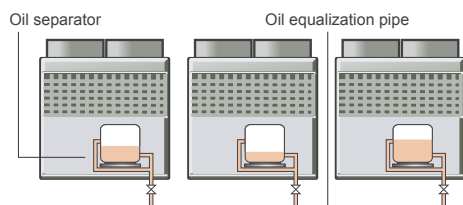
Each indoor unit is controlled individually on the system network. This allows all indoor units continue to run unaffected even if trouble should occur at any indoor unit(s) in one system.



Optimum oil control

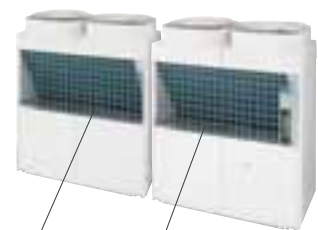
Stable operation of compressor by optimum oil control

- 1 High trapping efficiency, large capacity cyclone type oil separator
- 2 Oil balance control which maintains uniform oil levels
- 3 Optimum EEV control for oil and refrigerant circulation

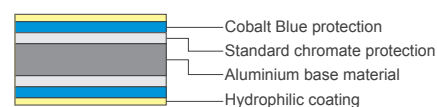


Adoption of blue fin heat exchanger

Corrosion-resistance of the heat exchanger even in coastal areas has been improved by blue fin treatment of the outdoor unit heat exchanger.



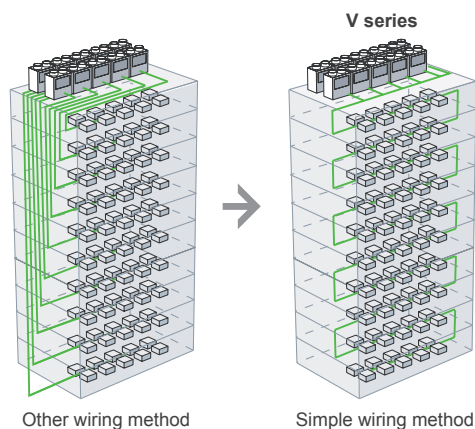
Blue fin heat exchanger



Easy Installation

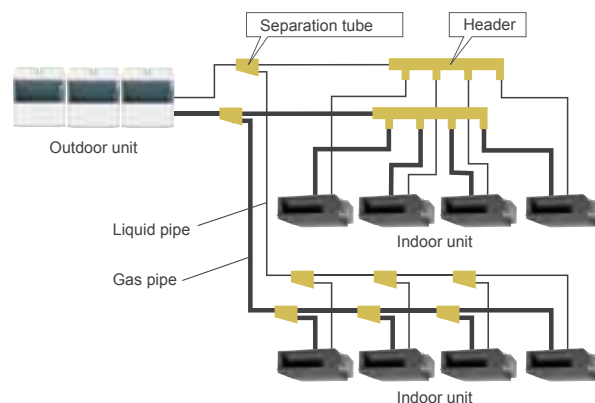
Simple signal line connection

Connection method simplifies installation and prevents errors
By using our wiring connection method, the wiring length is reduced compared to other wiring systems.

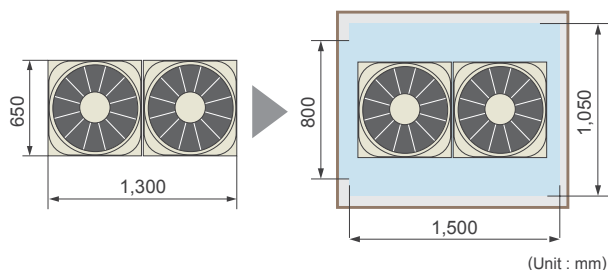


Simple piping system

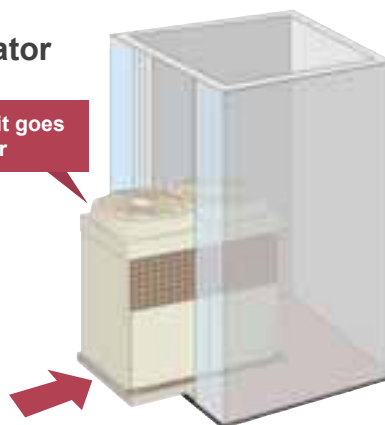
Separation tubes and headers provide connection flexibility and simplicity reducing installation costs.



Compact outdoor unit can be carried in a small elevator

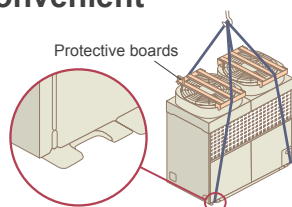


Outdoor unit goes into elevator



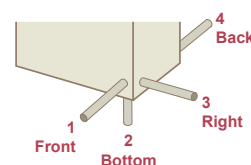
Lifting belt hooks convenient in crane work

The outdoor unit can be lifted by crane and set down on the building roof.



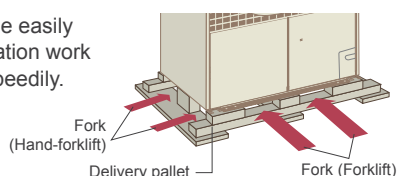
Choice of 4-direction piping connection

4-direction piping allows a variety of installation configurations. Easy installation and pipe direction setting.



Easy removing pallet

Delivery pallet can be easily removed and installation work can be performed speedily.



Pipe size reduction

Use of R410A refrigerant allows for a pipe size reduction compared to the conventional system. This offers improvement in construction work and a reduction in piping costs.

Slimming down of piping $\varnothing 28.6 \rightarrow \varnothing 22.2$

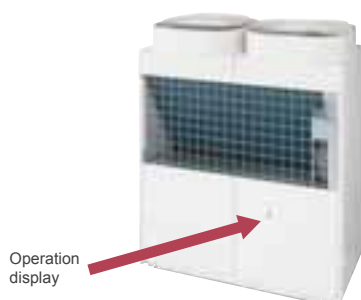
In case of gas pipe for 10HP outdoor unit

Service & Maintenance

Operating display

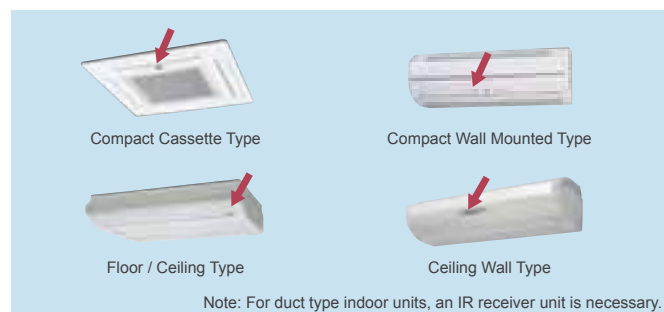
Outdoor unit

By indicating the operating status and details of failures on a PCB in the outdoor unit, better service and quick and easy maintenance are possible.



Indoor unit

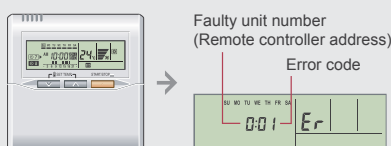
The operation status of the indoor unit can be easily checked by operation indicator. In addition, when an error occurs, the error contents are displayed and repair work can be performed quickly.



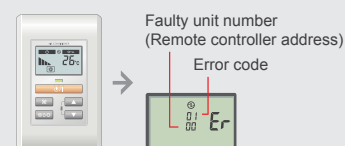
Error display with self-diagnosis function

When an error or abnormality occurred in the system, the indoor unit No. and error code at which the error occurred are displayed at the display section of the controller. (Except wireless remote controller)

Wired Remote Controller

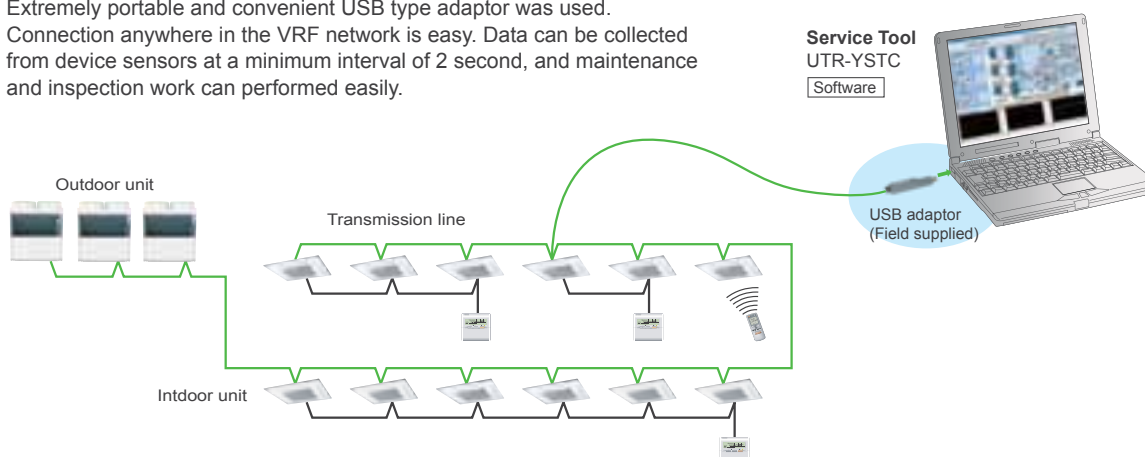


Simple Remote Controller



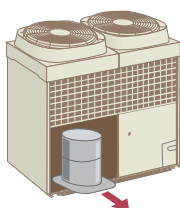
Improves maintenance and inspection mobility (Service Tool)

Extremely portable and convenient USB type adaptor was used. Connection anywhere in the VRF network is easy. Data can be collected from device sensors at a minimum interval of 2 second, and maintenance and inspection work can be performed easily.



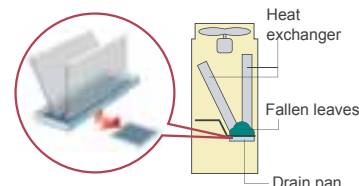
Easy replacement

Compressor can be moved by pull-out tray which simplifies inspection and replacement work. A pull-out plate ensures easy compressor replacement if necessary.



Drain pan cleaning is easy



Detachable drain pan simplifies removal of fallen leaves collected in the drain pan at the bottom of the heat exchanger






Outdoor units

Lineup and Combination

Capacity Lineup

Unit	HP	Capacity	Model name
 Master units	8	22.4kW	AJYA72LBTF
	10	28.0kW	AJYA90LBTF
	14	40.0kW	AJY126LBTF
 Slave units	8	22.4kW	AJYA72UBTF
	10	28.0kW	AJYA90UBTF
	14	40.0kW	AJY126UBTF

Combination

Unit	HP	Capacity (kW)	Master	Slave 1	Slave 2
	8	22.4	AJYA72LBTF	—	—
	10	28.0	AJYA90LBTF	—	—
	14	40.0	AJY126LBTF	—	—
	16	44.8	AJYA72LBTF	AJYA72UBTF	—
	18	50.4	AJYA90LBTF	AJYA72UBTF	—
	20	56.0	AJYA90LBTF	AJYA90UBTF	—
	22	62.4	AJY126LBTF	AJYA72UBTF	—
	24	68.0	AJY126LBTF	AJYA90UBTF	—
	26	72.8	AJYA90LBTF	AJY126UBTF	—
	28	80.0	AJY126LBTF	AJYA72UBTF	AJYA72UBTF
	30	84.0	AJYA90LBTF	AJYA90UBTF	AJYA90UBTF
	32	90.4	AJY126LBTF	AJYA90UBTF	AJYA72UBTF
	34	96.0	AJY126LBTF	AJYA90UBTF	AJYA90UBTF
	36	102	AJY126LBTF	AJY126UBTF	AJYA72UBTF
	38	108	AJY126LBTF	AJY126UBTF	AJYA90UBTF
	42	120	AJY126LBTF	AJY126UBTF	AJY126UBTF

Specifications

Rating Capacity range			HP	8	10	14	16	18	20	22
Unit 1 Unit 2 Unit 3				AJYA72LBTF	AJYA90LBTF	AJY126LBTF	AJYA72LBTF AJYA72UBTF	AJYA90LBTF AJYA72UBTF	AJYA90LBTF AJYA90UBTF	AJY126LBTF AJYA72UBTF
Maximum Connectable Indoor Unit				15	16	16	30	32	32	32
Indoor unit connectable capacity	Cooling	kW		11.2-33.6	14.0-42.0	20.0-60.0	22.4-67.2	25.2-75.6	28.0-84.0	31.2-93.6
Power source				3Phase 380-415V 50Hz						
Capacity	Cooling	kW		22.4	28.0	40.0	44.8	50.4	56.0	62.4
	Heating	kW		25.0	31.5	45.0	50.0	56.5	63.0	70.0
Input power	Cooling	kW		7.00	8.75	13.3	14.0	15.8	17.5	20.3
	Heating	kW		6.76	8.51	13.2	13.5	15.3	17.0	20.0
EER	Cooling	W/W		3.20	3.20	3.00	3.20	3.20	3.20	3.07
COP	Heating	W/W		3.70	3.70	3.40	3.70	3.70	3.70	3.50
Air flow rate	High	m³/h		10700	10700	10800	10700 x 2	10700 x 2	10700 x 2	10800+10700
Sound pressure level*2	Cooling	dB (A)		58	58	60	61	61	61	62
	Heating	dB (A)		60	60	62	63	63	63	64
Compressor motor output		kW		3.0 + 4.6	3.0 + 4.6	3.0 + 4.6 + 4.6	3.0 + 4.6 / 3.7 + 3.7	3.0 + 4.6 / 3.7 + 3.7	3.0 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 3.7 + 3.7
Heat exchanger fin				Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm		1500	1500	1500	1500	1500	1500	1500
	Width	mm		1300	1300	1300	1300	1300	1300	1300
	Depth	mm		650	650	650	650	650	650	650
Weight		kg		269	269	374	269 + 272	269 + 272	269 + 272	374 + 272
Refrigerant charge		kg		14.0	14.0	15.5	14.0 + 14.0	14.0 + 14.0	14.0 + 14.0	15.5 + 14.0
Connection pipe diameter	Liquid	mm		ø12.70	ø12.70	ø12.70	ø12.70	ø15.88	ø15.88	ø15.88
	Gas	mm		ø22.22	ø22.22	ø28.58	ø28.58	ø28.58	ø28.58	ø34.92
Operation range	Cooling	°C		-15 to 43	-15 to 43	-15 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43
	Heating	°C		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

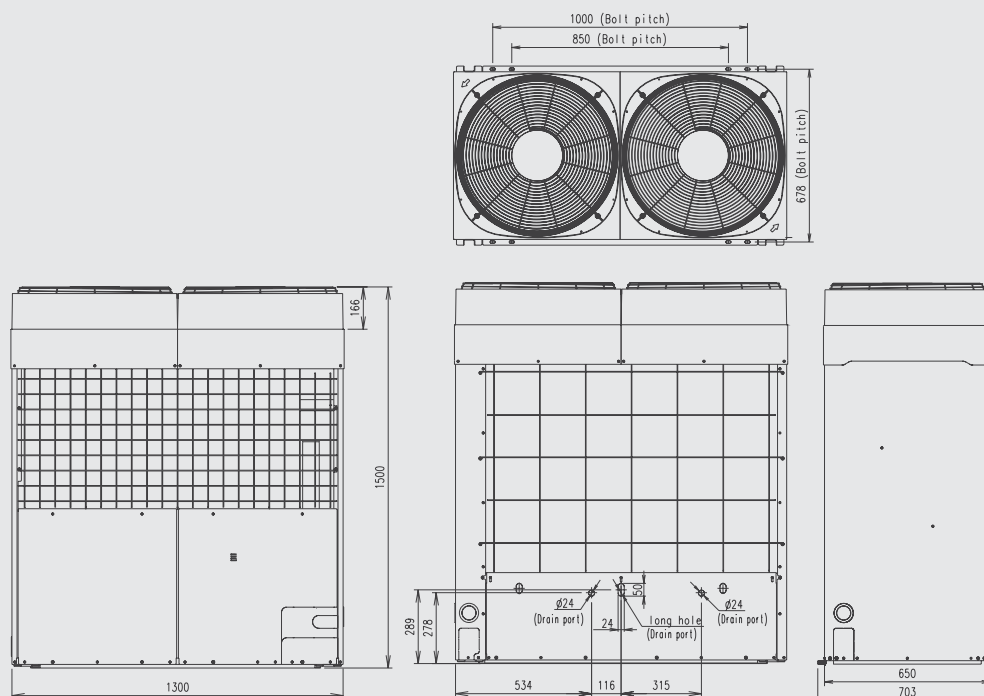
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5m; Height difference between outdoor unit and indoor unit : 0m.

Dimensions

























Master unit and slave unit are same dimensions.

(Unit : mm)



24	26	28	30	32	34	36	38	42
AJY126LBTF AJYA90UBTF	AJYA90LBTF AJYA72UBTF AJYA72UBTF	AJY126LBTF AJY126UBTF	AJYA90LBTF AJYA90UBTF AJYA90UBTF	AJY126LBTF AJYA90UBTF AJYA72UBTF	AJY126LBTF AJYA90UBTF AJYA90UBTF	AJY126LBTF AJY126UBTF AJYA72UBTF	AJY126LBTF AJY126UBTF AJYA90UBTF	AJY126LBTF AJY126UBTF AJY126UBTF
32	32	32	48	48	48	48	48	48
34.0-102	36.4-109	40.0-120	42.0-126	45.2-135	48.0-144	51.0-153	54.0-162	60.0-180
3Phase 380-415V 50Hz								
68.0	72.8	80.0	84.0	90.4	96.0	102	108	120
76.5	81.5	90.0	94.5	102	108	115	122	135
22.1	22.8	26.7	26.3	29.1	30.8	33.7	35.4	40.0
21.7	22.0	26.5	25.5	28.5	30.3	33.2	35.0	39.7
3.08	3.20	3.00	3.20	3.11	3.11	3.04	3.05	3.00
3.52	3.70	3.40	3.70	3.56	3.57	3.27	3.47	3.40
10800+10700	10700 x 3	10800 x 2	10700 x 3	10800+10700 x 2	10800+10700 x 2	10800 x 2+10700	10800 x 2+10700	10800 x 3
62	62	62	62	63	63	63	64	64
64	64	64	64	65	65	65	66	66
3.0 + 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 / 3.7 + 3.7 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6	3.0 + 4.6 / 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 3.7 + 3.7	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 4.6 + 4.6	3.0 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6 / 4.6 + 4.6 + 4.6
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1500 1500	1500 1500 1500	1500 1500	1500 1500 1500	1500 1500 1500	1500 1500 1500	1500 1500 1500	1500 1500 1500	1500 1500 1500
1300 1300	1300 1300 1300	1300 1300	1300 1300 1300	1300 1300 1300	1300 1300 1300	1300 1300 1300	1300 1300 1300	1300 1300 1300
650 650	650 650 650	650 650	650 650 650	650 650 650	650 650 650	650 650 650	650 650 650	650 650 650
374 + 272	269 + 272 + 272	374 + 377	269 + 272 + 272	374 + 272 + 272	374 + 272 + 272	374 + 377 + 272	374 + 377 + 272	374 + 377 + 377
15.5 + 14.0	14.0 + 14.0 + 14.0	15.5 + 15.5	14.0 + 14.0 + 14.0	15.5 + 14.0 + 14.0	15.5 + 14.0 + 14.0	15.5 + 15.5 + 14.0	15.5 + 15.5 + 14.0	15.5 + 15.5 + 15.5
$\phi 15.88$	$\phi 15.88$	$\phi 15.88$	$\phi 19.05$	$\phi 19.05$	$\phi 19.05$	$\phi 19.05$	$\phi 19.05$	$\phi 19.05$
$\phi 34.92$	$\phi 34.92$	$\phi 34.92$	$\phi 34.92$	$\phi 34.92$	$\phi 34.92$	$\phi 41.27$	$\phi 41.27$	$\phi 41.27$
-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43	-5 to 43
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21






Indoor units lineup

Capacity range (kW)	2.20	2.20	3.60	4.05	5.30	5.70	
Model code	7	9	12	14	18	20	
Compact Cassette	 AUXB07LATF	 AUXB09LATF	 AUXB12LATF	 AUXB14LATF	 AUXB18LATF		
<small>Slim Type</small> Cassette						 AUYA20LATF	
<small>Silent model</small> Compact Duct	 ARXB07LALF	 ARXB09LALF	 ARXB12LALF	 ARXB14LALF	 ARXB18LALF		
<small>Silent model</small> Low Static Pressure Duct							
Duct							
High Static Pressure Duct							
Floor / Ceiling			 ABYA12LATF	 ABYA14LATF	 ABYA18LATF		
Ceiling							
<small>Comfort model</small> Compact Wall Mounted*2	 ASYE07LACF	 ASYE09LACF	 ASYE12LACF	 ASYE14LACF			
With this model, connection of EV kit is necessary.							
Wall Mounted					 ASYA18LATF		
Ceiling Wall	 AWYA07LATF	 AWYA09LATF	 AWYA12LATF	 AWYA14LATF	 AWYA18LATF		

*1:ARXC90 model can not be connected to S series outdoor unit.

*2:Compact wall mounted model can not be connected S series Heat Recovery outdoor unit.

11 Types, 50 Models, Capacity range from 2.2kW to 25.4kW
Indoor units of S series and V series are compatible

	6.80 24	7.05 25	8.80 30	10.5 36	12.7 45	14.1 54	17.0 60	25.4 90
		 Slim Type AUYA25LATF	 Slim Type AUYA30LATF					
								
								
								
	ABYA24LATF							
								
	ASYA24LATF							
	AWYA24LATF							

Indoor units specifications

Compact Cassette



Model name			AUXB07LATF	AUXB09LATF	AUXB12LATF	AUXB14LATF	AUXB18LATF
Power source			220-240V 50Hz				
Capacity	Cooling	kW	2.20	2.80	3.60	4.00	5.00
	Heating		2.50	3.20	4.10	4.50	5.45
Input power		W	28	28	52	52	50
Airflow rate	High	m³/h	530	530	580	580	640
	Med		480	480	520	520	540
	Low		410	410	460	460	470
Sound pressure level	High	dB(A)	38	38	41	41	44
	Med		35	35	37	37	38
	Low		31	31	34	34	35
Dimensions (H x W x D)		mm	230 x 570 x 570	230 x 570 x 570	230 x 570 x 570	230 x 570 x 570	230 x 570 x 570
Weight		kg	18	18	18	18	18
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52
	Gas (Flare)		ø12.7	ø12.7	ø12.7	ø12.7	ø15.88
Grille			UTG-UDYD-W (Option)				

Note : Specifications are based on the following conditions.

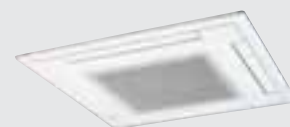
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Cassette



Model name			AUYA20LATF	AUYA25LATF	AUYA30LATF	AUYA36LATF	AUYA45LATF	AUYA54LATF
Power source			220-240V 50Hz					
Capacity	Cooling	kW	5.70	7.05	8.80	10.5	12.7	14.1
	Heating		5.80	7.85	9.10	12.7	13.7	15.8
Input power		W	104	124	140	175	190	219
Airflow rate	High	m³/h	1,000	1,100	1,250	1,500	1,550	1,700
	Med		840	940	1,050	1,300	1,350	1,420
	Low		700	780	840	1,100	1,100	1,200
Sound pressure level	High	dB(A)	41	43	46	47	48.5	51.5
	Med		37	40	43	42.5	46	47.5
	Low		33	35	37	38	41	43.5
Dimensions (H x W x D)	(Main body)	mm	246 x 830 x 830	246 x 830 x 830	246 x 830 x 830	296 x 830 x 830	296 x 830 x 830	296 x 830 x 830
	(With Panel)		265 x 940 x 940	265 x 940 x 940	265 x 940 x 940	315 x 940 x 940	315 x 940 x 940	315 x 940 x 940
Weight		kg	34	34	34	40	40	40
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø15.88	ø15.88	ø15.88	ø19.05	ø19.05	ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Compact Duct Low Static Pressure Duct Duct



Model name			ARXB07 LALF	ARXB09 LALF	ARXB12 LALF	ARXB14 LALF	ARXB18 LALF	ARXB25 LATF	ARXB30 LATF	ARXB36 LATF	ARXB45 LATF	ARXA25 LATF	ARXA30 LATF	ARXA36 LATF	ARXA45 LATF
Power source			220-240V 50Hz												
Capacity	Cooling	kW	2.20	2.80	3.60	4.00	5.30	7.00	8.80	10.5	12.7	7.00	8.80	10.5	12.7
	Heating		2.50	3.20	4.10	4.80	5.60	7.70	9.50	12.7	14.3	7.70	9.50	12.7	14.3
Input power		W	31.2	32.6	55.0	63.0	103.0	155	171	216	246	161	172	220	312
Airflow rate	High	m³/h	330	370	560	610	950	1,090	1,200	1,440	1,580	1,100	1,400	1,750	1,800
	Med		300	340	500	550	790	970	1,090	1,270	1,450	1,000	1,300	1,650	1,600
	Low		270	310	420	470	620	870	970	1,160	1,320	900	1,200	1,550	1,500
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50	0 to 80	0 to 80	0 to 80	0 to 80	30 to 150	30 to 150	30 to 150	30 to 150
Sound pressure level	High	dB(A)	29	31	30	31	40	29	31	35	37	38	40	43	44
	Med		27	29	28	29	35	26	28	32	35	36	38	41	42
	Low		24	27	25	26	30	24	26	30	33	34	36	39	40
Dimensions (H x W x D)		mm	217x663x595	217x663x595	217x953x595	217x953x595	217x953x595	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700	270x1,135x700
Weight		kg	18	18	25	25	25	43	43	43	45	43	43	43	45
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø12.7	ø12.7	ø12.7	ø12.7	ø15.88	ø15.88	ø15.88	ø19.05	ø19.05	ø15.88	ø15.88	ø19.05	ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V]; Standard static pressure : 0 Pa(ARXB07LALF,ARXB09LALF,ARXB12LALF,ARXB18LALF,ARXB25LATF,ARXB30LATF,ARXB36LATF,ARXB45LATF)

Voltage : 230 [V]; Standard static pressure :100 Pa(ARXA25LATF,ARXA30LATF,ARXA36LATF,ARXA45LATF)

High Static Pressure Duct



Model name			ARXC36LATF	ARXC45LATF	ARXC60LATF	ARXC90LATF
Power source			220-240V 50Hz			3Phase 380 to 415V 50Hz
Capacity	Cooling	kW	10.5	12.7	17.0	25.4
	Heating		12.7	14.3	18.2	29.5
Input power		W	405	427	427	970
Airflow rate	High	m³/h	2,500	3,500	3,500	3,950
	Med		1,950	3,000	3,000	-
	Low		1,450	2,460	2,460	-
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	100 to 300
Sound pressure level	High	dB(A)	45	49	49	50
	Med		38	45	45	-
	Low		32	42	42	-
Dimensions (H x W x D)		mm	400 x 1,050 x 500	400 x 1,050 x 500	400 x 1,050 x 500	450 x 1,550 x 700
Weight		kg	45	45	50	82
Connection pipe diameter	Liquid (Flare)	mm	ø9.52(Flare)	ø9.52 (Flare)	ø9.52(Flare)	ø12.7 (Brazing)
	Gas (Flare)		ø19.05 (Flare)	ø19.05 (Flare)	ø19.05 (Flare)	ø22.22(Brazing)

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V]; Standard static pressure : 100 Pa (ARXC36LATF, ARXC45LATF, ARXC60LATF).

Voltage : 400 [V]; Standard static pressure : 200 Pa (ARXC90LATF).

Indoor units specifications

Floor / Ceiling



Model name			ABYA12LATF	ABYA14LATF	ABYA18LATF	ABYA24LATF
Power source			220-240V 50Hz			
Capacity	Cooling	kW	3.60	4.05	5.30	6.60
	Heating		4.10	5.00	5.60	7.70
Input power		W	57	57	88	88
Airflow rate	High	m³/h	640	640	780	880
	Med		560	560	650	740
	Low		480	480	550	630
Sound pressure level	High	dB(A)	40	40	46	48
	Med		37	37	41.5	45
	Low		34	34	37	41
Dimensions (H x W x D)		mm	199 x 990 x 655	199 x 990 x 655	199 x 990 x 655	199 x 990 x 655
Weight		kg	28	28	28	28
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø9.52	ø9.52
	Gas (Flare)		ø12.7	ø12.7	ø15.88	ø15.88

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Ceiling



Model name			ABYA30LATF	ABYA36LATF	ABYA45LATF	ABYA54LATF
Power source			220-240V 50Hz			
Capacity	Cooling	kW	8.80	10.5	12.7	14.1
	Heating		9.10	12.7	13.7	15.8
Input power		W	124	144	160	180
Airflow rate	High	m³/h	1,450	1,660	1,850	2,200
	Med		1,280	1,500	1,660	2,000
	Low		980	1,270	1,430	1,800
Sound pressure level	High	dB(A)	42	45	48	52
	Med		39	42	46	50
	Low		35	37	41	46
Dimensions (H x W x D)		mm	240 x 1,660 x 700	240 x 1,660 x 700	240 x 1,660 x 700	240 x 1,660 x 700
Weight		kg	48	48	48	48
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø15.88	ø19.05	ø19.05	ø19.05

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Compact Wall Mounted



Model name			ASYE07LACF	ASYE09LACF	ASYE12LACF	ASYE14LACF
Power source			220-240V 50Hz			
Capacity	Cooling	kW	2.20	2.80	3.60	4.00
	Heating		2.50	3.20	4.10	4.80
Input power		W	13	13	17	19
Airflow rate	High	m³/h	490	490	560	600
	Med		450	450	480	490
	Low		370	370	420	420
Sound pressure level	High	dB(A)	34	34	38	39
	Med		32	32	34	35
	Low		26	26	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215	275 x 790 x 215	275 x 790 x 215	275 x 790 x 215
Weight		kg	9	9	9	9
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35
	Gas (Flare)		ø12.7	ø12.7	ø12.7	ø12.7
EV Kit			UTR-EV09XA (Option)		UTR-EV14XA (Option)	

Wall Mounted



Model name			ASYA18LATF	ASYA24LATF	ASYA30LATF
Power source			220-240V 50Hz		
Capacity	Cooling	kW	5.40	6.90	8.00
	Heating		5.60	7.80	8.80
Input power		W	38	50	60
Airflow rate	High	m³/h	800	970	1,040
	Med		650	870	910
	Low		550	750	730
Sound pressure level	High	dB(A)	41	45	47.5
	Med		36.5	41	44
	Low		33	37	39.5
Dimensions (H x W x D)		mm	320 x 1,120 x 220	320 x 1,120 x 220	320 x 1,120 x 220
Weight		kg	16	16	16
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø15.88	ø15.88	ø15.88

Ceiling Wall



Model name			AWYA07LATF	AWYA09LATF	AWYA12LATF	AWYA14LATF	AWYA18LATF	AWYA24LATF	AWYA30LATF
Power source			220-240V 50Hz						
Capacity	Cooling	kW	2.20	2.80	3.60	4.30	5.40	6.90	8.00
	Heating		2.50	3.20	4.10	4.90	5.60	7.80	8.80
Input power		W	16	19	20	21	30	40	50
Airflow rate	High	m³/h	380	480	600	650	760	900	950
	Med		330	420	520	570	660	780	870
Sound pressure level	Low	dB(A)	290	390	470	490	560	650	780
	High		34	35	35	37	40	44	47
	Med		32	32	33	35	37	41	45
	Low		30	30	31	32	34	37	42
Dimensions (H x W x D)		mm	270 x 1,150 x 285	270 x 1,150 x 285	270 x 1,150 x 285	270 x 1,150 x 285	270 x 1,150 x 285	270 x 1,150 x 285	270 x 1,150 x 285
Weight		kg	16	16	16	16	16	16	16
Connection pipe diameter	Liquid (Flare)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52	ø9.52	ø9.52
	Gas (Flare)		ø12.7	ø9.52	ø12.7	ø12.7	ø15.88	ø15.88	ø15.88

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Smart and cutting edge design
Extensive lineup from 8HP to 48HP
in 2HP increment
Connectable indoor unit capacity
ratio up to 150%



8, 10, 12HP **NEW**

14, 16HP **NEW**

High Efficiency

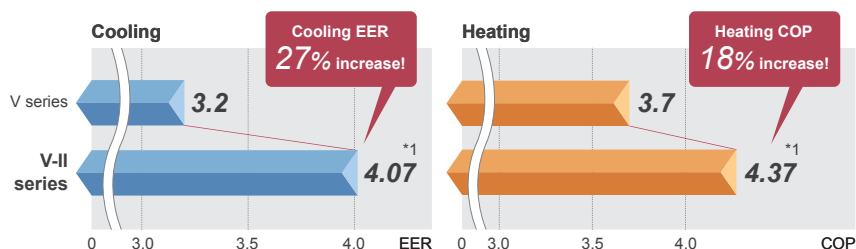
Significantly improved EER/COP

Significantly greater efficiency is realized by the use of a DC twin rotary compressor, inverter technology, and large heat exchanger.

* "EER/COP" is the coefficient of performance
[= capacity (kW) ÷ input power (kW)].

*EER/COP values are based on our own testing method.

*1. The data refers to a 8HP outdoor unit.

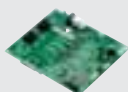


Energy saving technology that boosted operation efficiency



DC Fan motor:

Power consumption has been reduced by 25% compared to previous models by using a compact and high performance DC fan motor.



Sine-wave DC inverter control:

High efficiency operation is realized by using a sine wave DC inverter control.



DC twin rotary compressor:

Significantly greater efficiency is realized by use of a large capacity DC twin rotary compressor with substantially increased refrigerant intake and compression efficiency.

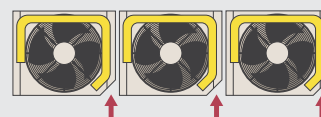


4-face heat exchanger: Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.



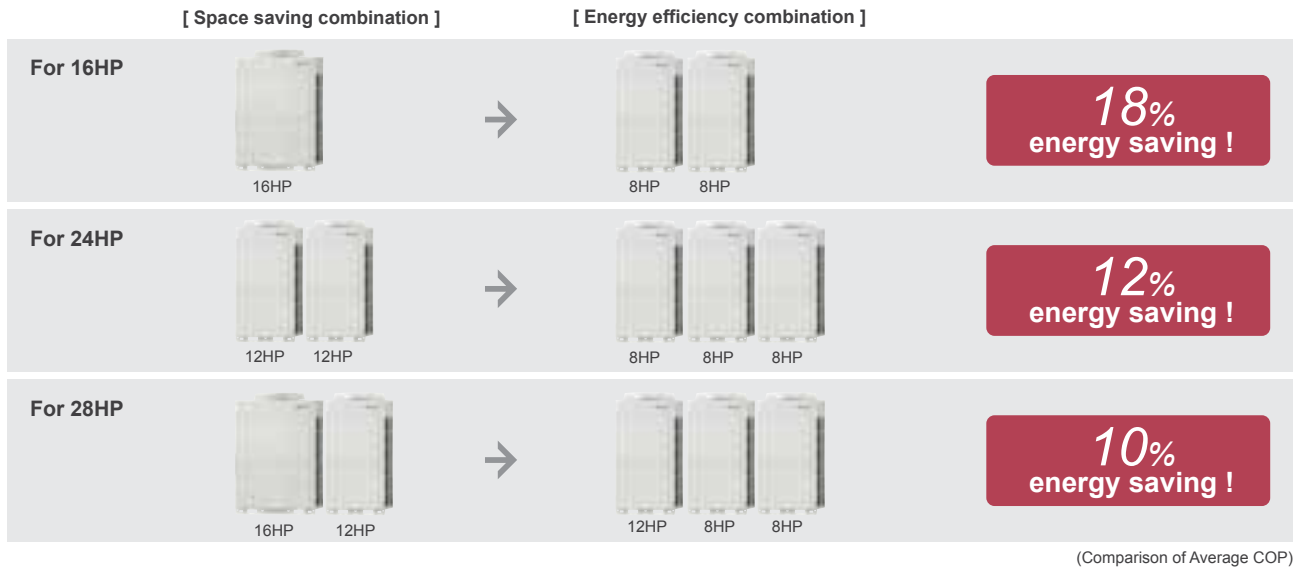
Surface area
1.7 times!

In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.



Energy Efficiency Combination

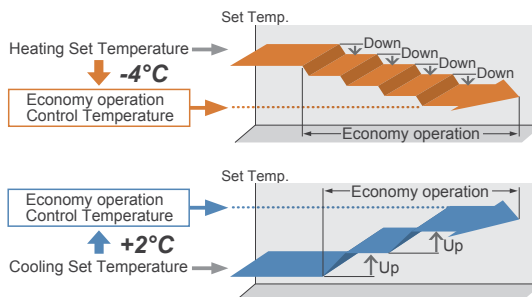
Choice of space saving or energy efficiency combinations



Various Energy Saving Features

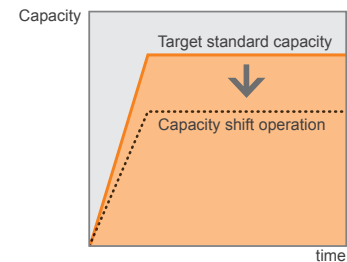
Economy operation

Economy operation can be set by remote controller. The temperature setting is offset automatically over a certain period of time.



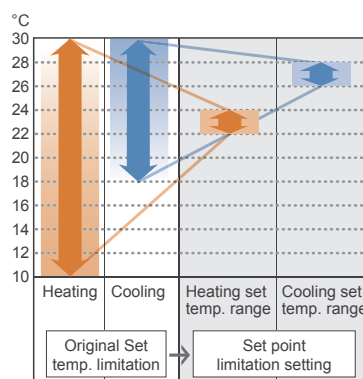
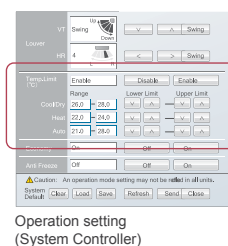
Capacity shift operation

When the heat load is minimal, capacity can be reduced according to surrounding conditions.



Room temperature set point limitation

The minimum and maximum temperature range can be set giving further energy saving while considering the comfort of the occupants.



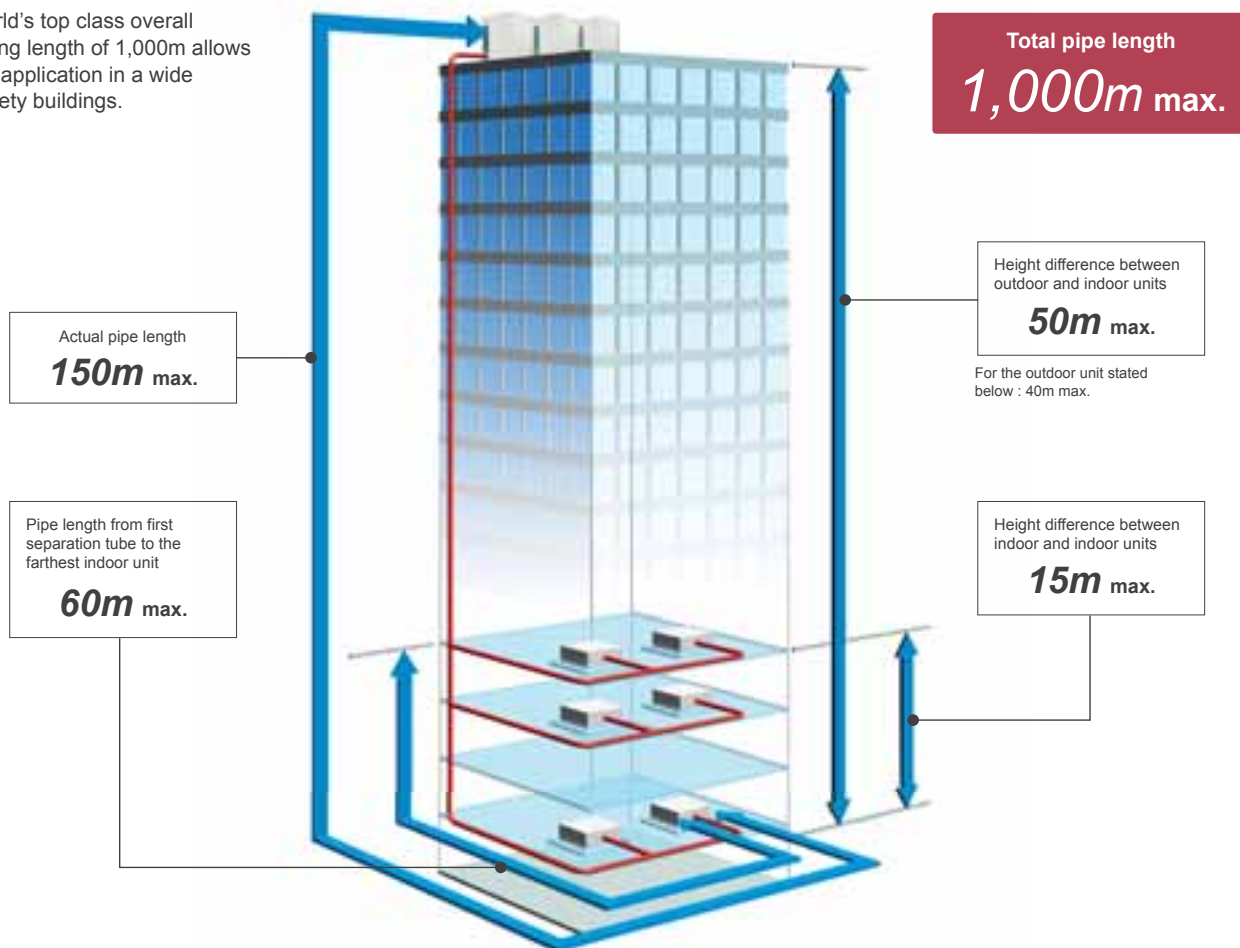
Auto-off timer

Each remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation. This prevents wasteful operation. (NB Except simple remote controller)

Design Versatility

Overall piping length 1,000m

World's top class overall piping length of 1,000m allows for application in a wide variety of buildings.



High static pressure of 80Pa

The outdoor unit can have a condenser hood easily connected with a static pressure of 80Pa standard. This allows outdoor units to be installed within plant rooms in high rise buildings.

Powerful discharge with an external static pressure of 80Pa.

Previous model

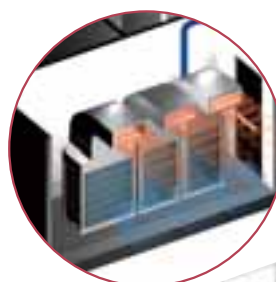


V-II series



Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa. This is approximately 2.6 times greater than the previous model.

80Pa
as standard

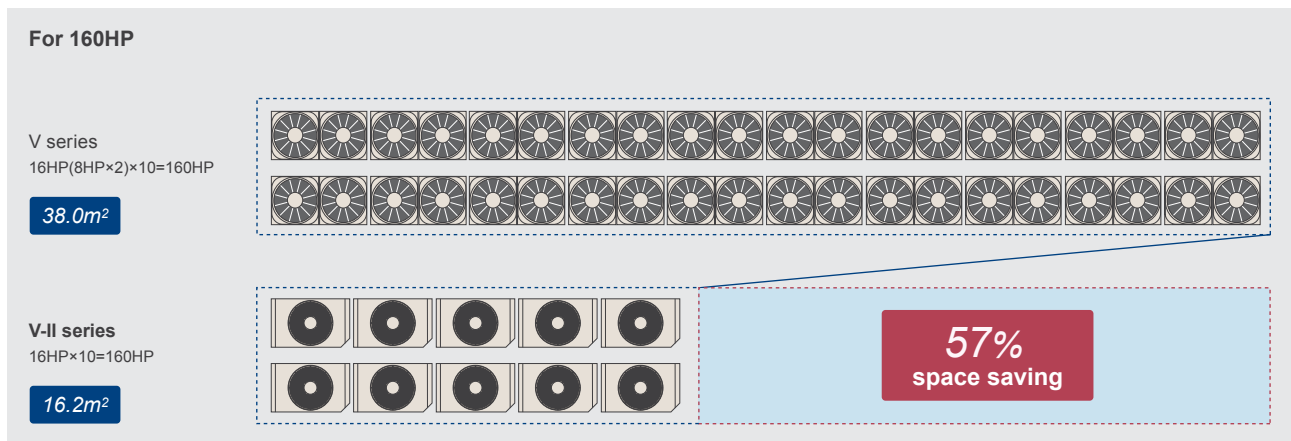
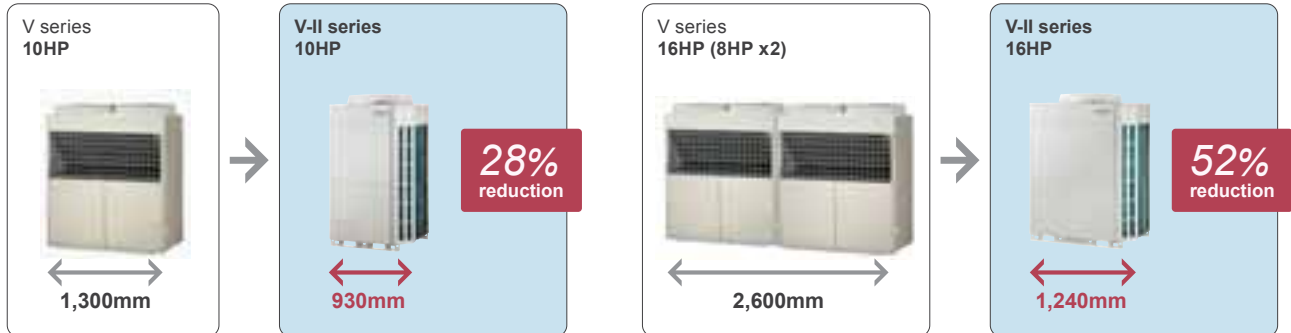


Installation Example



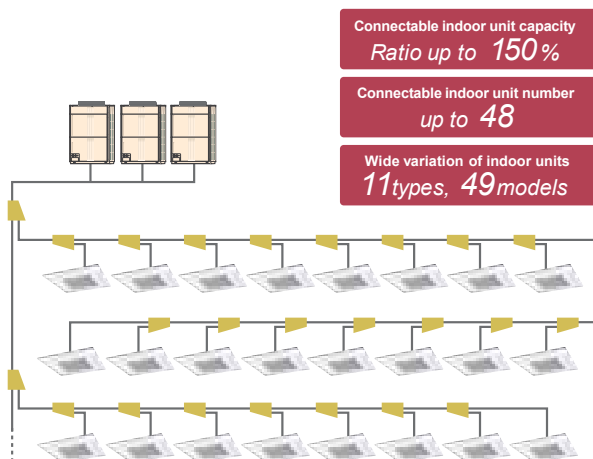
Space saving and compact size

Compact size has been achieved by significantly reducing the width of the outdoor units compared to previous models.



High capacity connection

Various combination from 8HP to 48HP with 2HP increments. 11 types, 49 models of indoor units can be selected ranging from 2.2kW to 25kW in capacity. A maximum of 150% indoor unit connectable capacity.

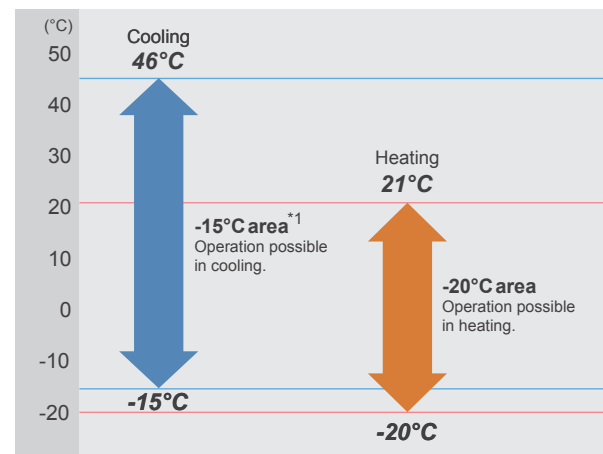


Note : when indoor unit connected capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

Wide operating range

Installation in extreme temperature conditions is possible due to an increase in operational range.

Cooling : -15°C~46°C
Heating : -20°C~21°C



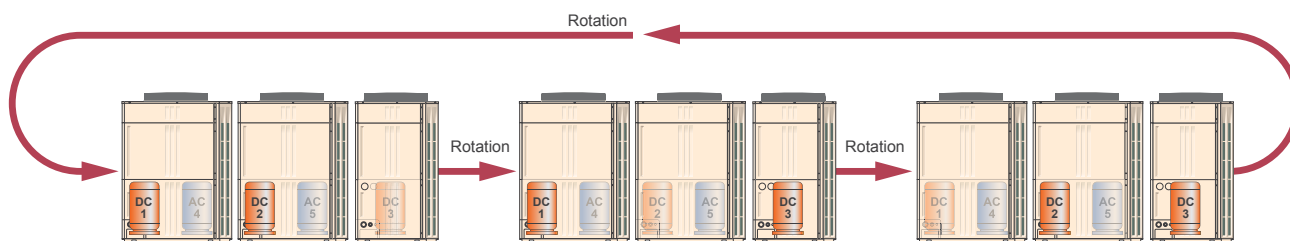
*1 Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

High Reliability

Longer lasting units

Outdoor unit operation rotation

The compressor starting order is rotated so that the running time is shared.



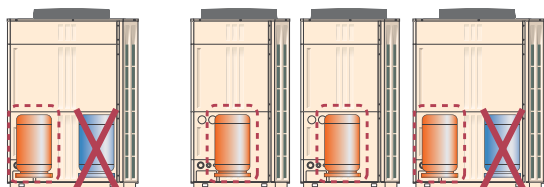
Note: The inverter compressors start in priority. Rotate operation is alternated by the start / stop timing of the compressors

Continuous operation

If one of two compressors malfunctions, it will not affect the operation of the remaining outdoor units.

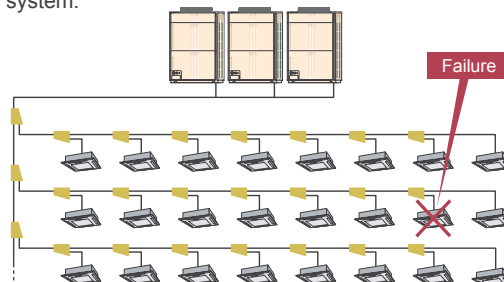
Outdoor Units

If one of compressors fails, emergency operation will be performed by the remaining compressors.



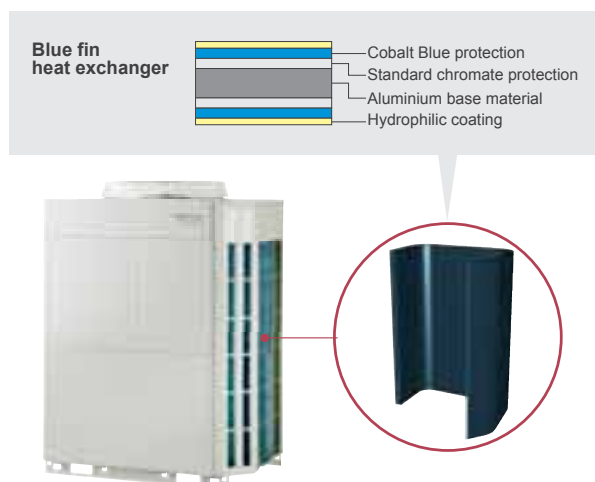
Indoor unit continuous operation

Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to operate unaffected even if an error should occur at any indoor unit's on the VRF system.



Adoption of blue fin heat exchanger

Corrosion resistant of the heat exchanger has been improved by the introduction of blue fin treatment to the outdoor unit's heat exchanger.



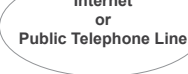
Remote monitoring

The Web Monitoring system allows you view system operation at all times over the internet ensuring trouble free operation.

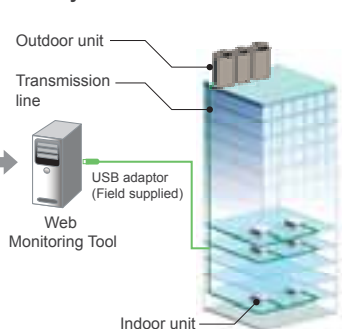
Monitoring Side



Internet or Public Telephone Line



VRF System Side



The operating VRF system in the building can be monitored in real time over the Internet.

Easy Installation

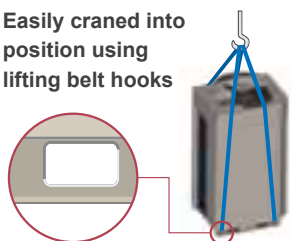
Easily transported

Light weight

20% weight reduction
(Than Previous model)

Note:
In the case of 14HP

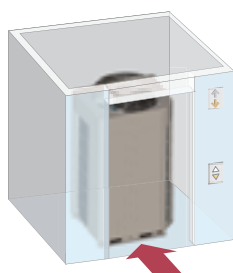
Easily craned into
position using
lifting belt hooks



Design of outdoor unit allows for
lifting straps to be used

Transporting by forklift

Can be transported in
a small elevator

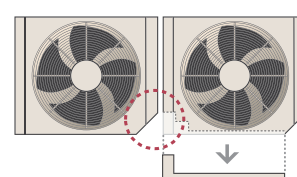


Easy access

By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



Expansion of work space

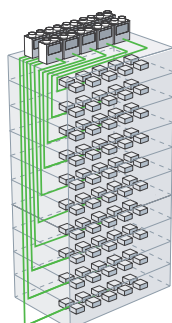


Simple signal line connection

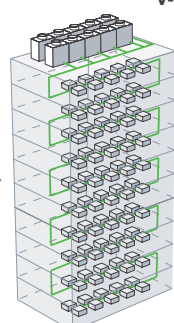
Installation is made easier as the
communications wiring can be connected
continuously to any component.

Up to maximum
length **3,600m**

V-II series



Other wiring method

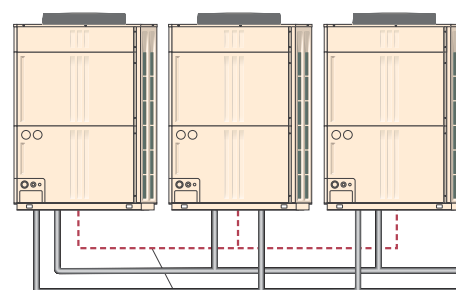


Simple wiring method

Note: In a multiple refrigerant system installation, Automatic addressing sequence cannot be initiated

Easy piping connection

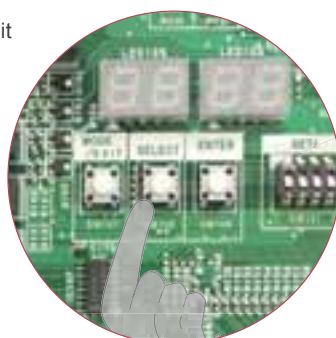
The need for a oil equalization pipe as required on the
previous model has been removed. The installation costs
have been reduced by employing a simple 2 pipe connection



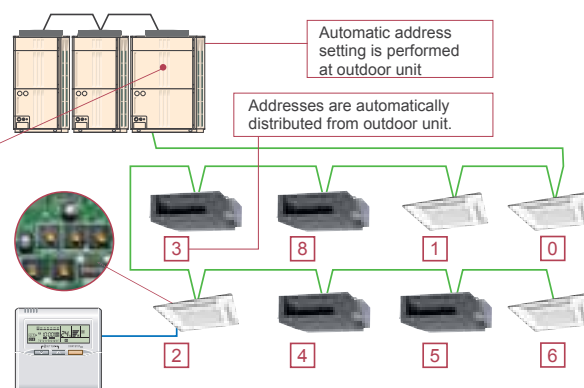
Eliminating oil equalization pipe

Automatic address setting

The address of each indoor unit
can be automatically set by
button switch of outdoor unit.



Press the pushbutton
switch of outdoor unit.

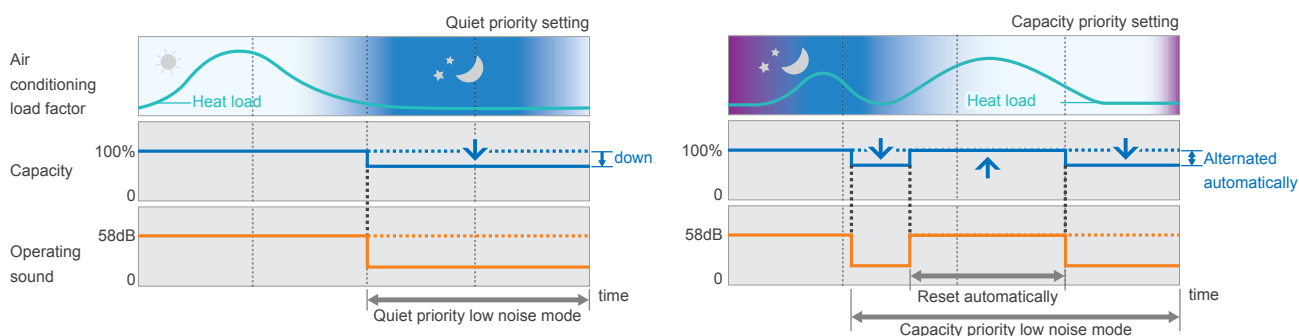


Manual address setting from indoor unit and remote controller is also possible.

Comfort and Convenience

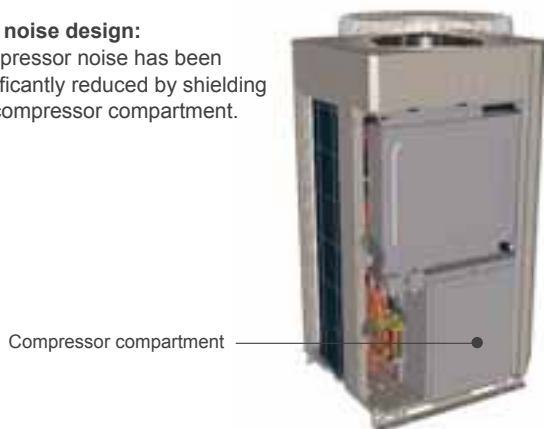
Quiet operation

Low noise mode: Two low noise modes can be selected automatically by quiet priority setting and capacity priority setting depending on the usage environment and outside temperature load.

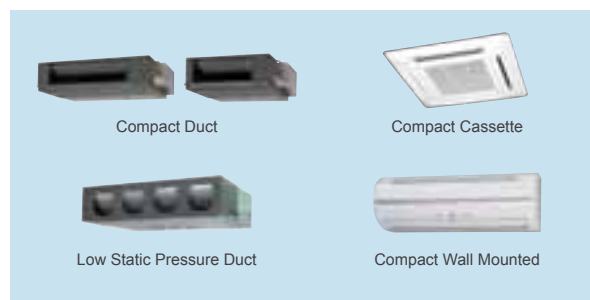


Low noise design:

Compressor noise has been significantly reduced by shielding the compressor compartment.



Indoor unit: Low noise indoor unit lineup



Auto changeover function

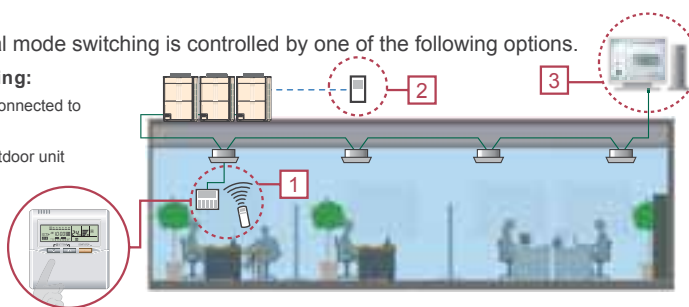
Auto changeover setting allows for the product to easily switch between Cooling and heating modes regardless of the operation mode of other indoor units. This can be done via specific indoor unit remote controller and / or by an external input control. This ensures comfortable operation all year round.

Command for operational mode switching is controlled by one of the following options.

1 selected from the following:

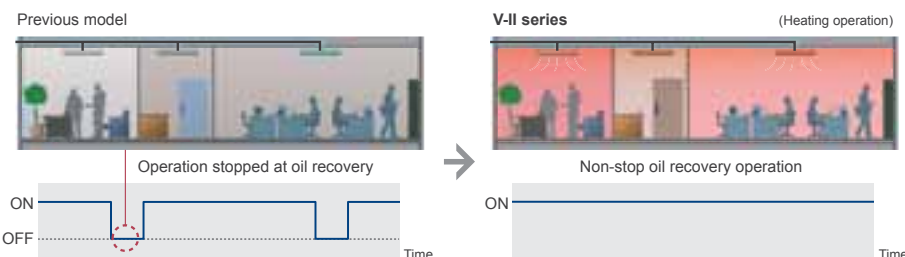
- 1 Various remote controllers connected to indoor unit
- 2 External input terminal of outdoor unit
- 3 System controller

Switching to cooling and heating mode by specific remote controller in the main room, etc.



Non-stop oil recovery operation

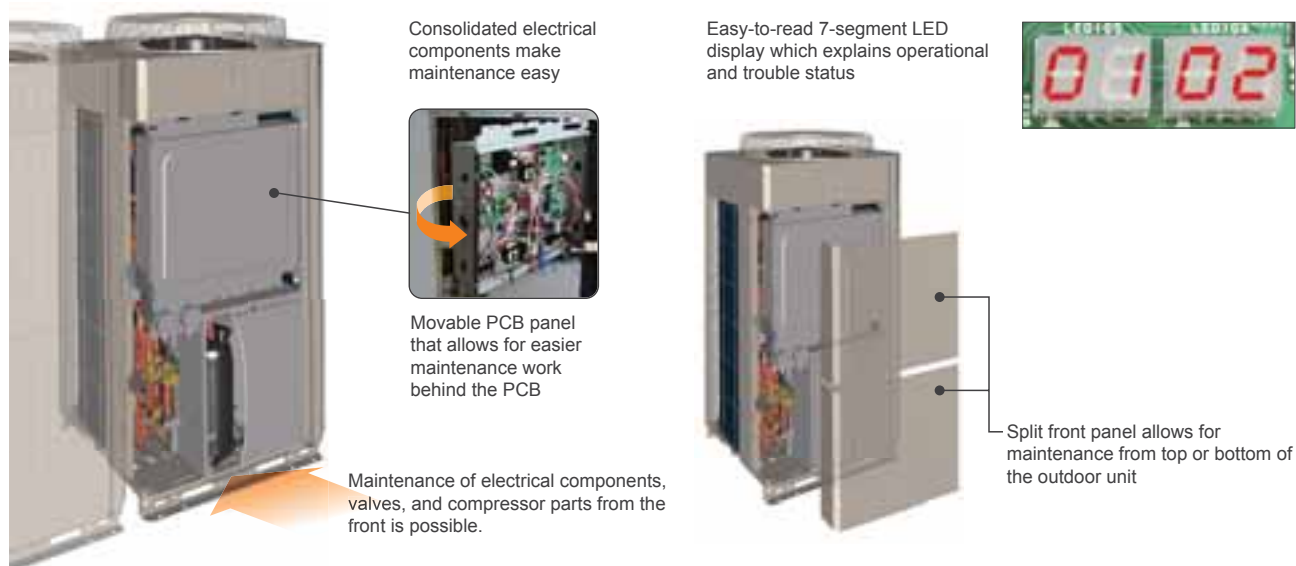
A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.



Easy Service & Maintenance

Design for easy service and maintenance

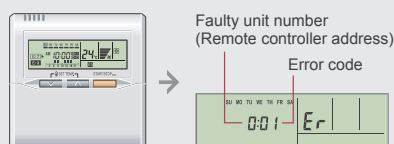
Inspection and replacement of main parts is easier due to innovative construction and an LED operational display.



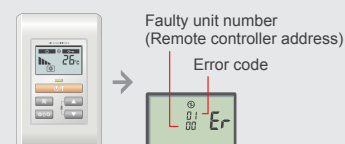
Error status can be checked easily via the indoor unit wired controller

An error code is displayed on a liquid crystal screen.

Wired Remote Controller



Simple Remote Controller

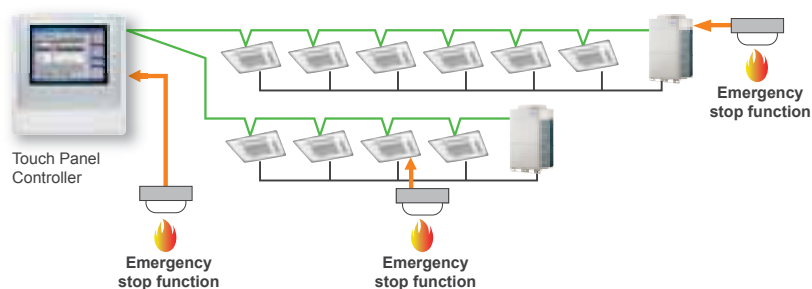


Emergency stop function

Emergency alarm can be received by indoor, outdoor units or Touch Panel Controller when they received it, all units will be stopped.

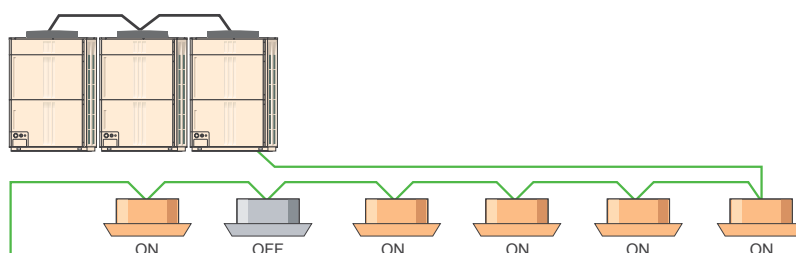
Note:

In case of received Emergency alarm by indoor/outdoor unit: All units connected within same refrigerant system will be stopped. Touch Panel Controller: all unit connected within VRF network system with Touch Panel Controller will be stopped.
























Continuous operation during maintenance





Non-stop operation: When servicing a specific indoor unit, maintenance can be performed even without turning off the other indoor units.



Outdoor units lineup

•Combinations other than the followings are not recommended.

Space saving combination				
22.4kW (8HP)  AJYA72LALH UNIT : AJYA72LALH	28.0kW (10HP)  AJYA90LALH UNIT : AJYA90LALH	33.5kW (12HP)  AJY108LALH UNIT : AJY108LALH	40.0kW (14HP)  AJY126LALH UNIT : AJY126LALH	45.0kW (16HP)  AJY144LALH UNIT : AJY144LALH
50.4kW (18HP)  AJY162LALH UNIT : AJYA90/A72LALH	55.9kW (20HP)  AJY180LALH UNIT : AJY108/A72LALH	61.5kW (22HP)  AJY198LALH UNIT : AJY108/A90LALH	67.0kW (24HP)  AJY216LALH UNIT : AJY108/108LALH	73.5kW (26HP)  AJY234LALH UNIT : AJY126/108LALH
78.5kW (28HP)  AJY252LALH UNIT : AJY126/108/108LALH	85.0kW (30HP)  AJY270LALH UNIT : AJY144/126LALH	90.0kW (32HP)  AJY288LALH UNIT : AJY144/144LALH	95.0kW (34HP)  AJY306LALH UNIT : AJY108/108/A90LALH	100.5kW (36HP)  AJY324LALH UNIT : AJY108/108/108LALH
107.0kW (38HP)  AJY342LALH UNIT : AJY126/108/108LALH	112.0kW (40HP)  AJY360LALH UNIT : AJY144/108/108LALH	118.5kW (42HP)  AJY378LALH UNIT : AJY144/126/108LALH	123.5kW (44HP)  AJY396LALH UNIT : AJY144/144/108LALH	130.0kW (46HP)  AJY414LALH UNIT : AJY144/144/126LALH
135.0kW (48HP)  AJY432LALH UNIT : AJY144/144/144LALH				

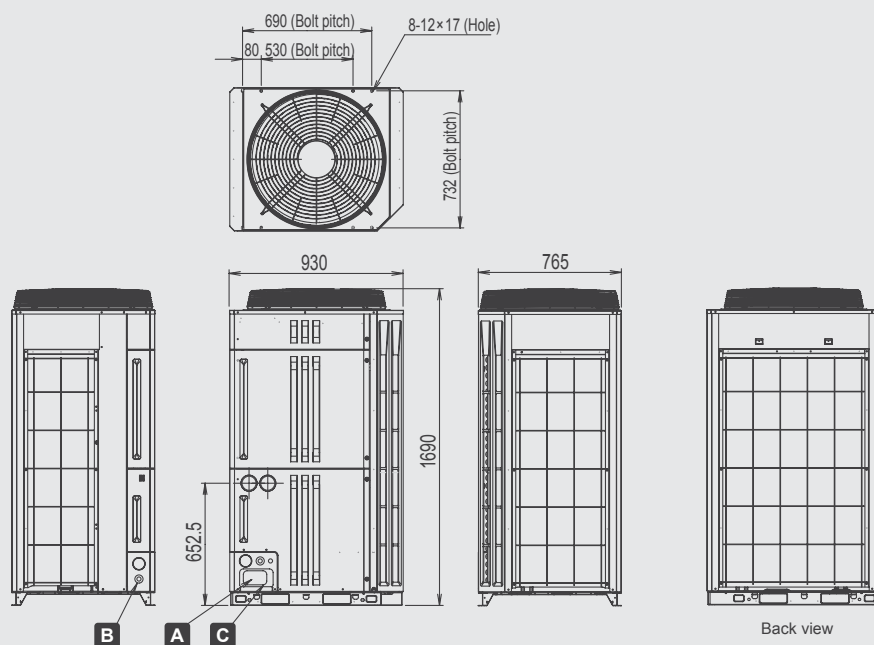
Energy efficiency combination				
44.8kW (16HP)  AJY144LALHH UNIT : AJYA72/A72LALH	62.4kW (22HP)  AJY198LALHH UNIT : AJY126/A72LALH	67.2kW (24HP)  AJY216LALHH UNIT : AJYA72/A72/A72LALH	72.8kW (26HP)  AJY234LALHH UNIT : AJYA90/A72/A72LALH	78.3kW (28HP)  AJY252LALHH UNIT : AJY108/A72/A72LALH
84.8kW (30HP)  AJY270LALHH UNIT : AJY126/A72/A72LALH	89.8kW (32HP)  AJY288LALHH UNIT : AJY108/108/A72LALH	95.9kW (34HP)  AJY306LALHH UNIT : AJY126/108/A72LALH	102.4kW (36HP)  AJY324LALHH UNIT : AJY126/126/A72LALH	113.5kW (40HP)  AJY360LALHH UNIT : AJY126/126/A108LALH
120.0kW (42HP)  AJY378LALHH UNIT : AJY126/126/126LALH	125.0kW (44HP)  AJY396LALHH UNIT : AJY144/126/126LALH			

Outdoor units dimensions

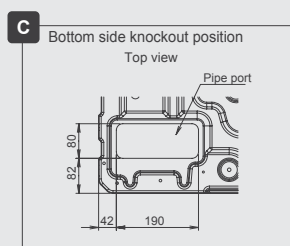
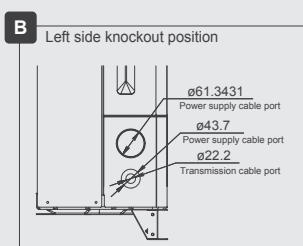
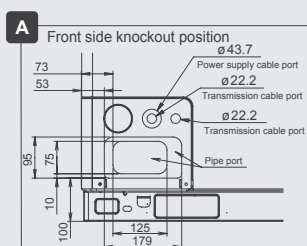
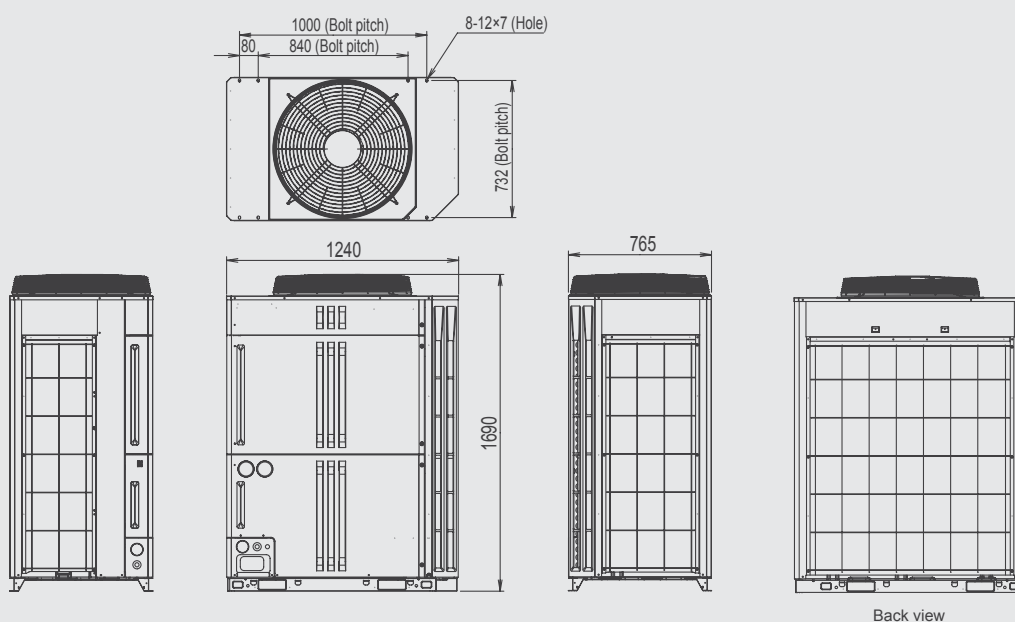
Dimensions

(Unit : mm)

8,10,12HP: AJYA72LALH / AJYA90LALH / AJY108LALH










14,16HP: AJY126LALH / AJY144LALH







Outdoor units specifications

Space Saving Combination

Rating Capacity range			HP	8	10	12	14	16	18	20	22	24
												
Model name				AJYA72LALH	AJYA90LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJY162LALH	AJY180LALH	AJY198LALH	AJY216LALH
Unit 1				AJYA72LALH	AJYA90LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJYA90LALH	AJY108LALH	AJY108LALH	AJY108LALH
Unit 2									AJYA72LALH	AJYA72LALH	AJYA90LALH	AJY108LALH
Unit 3												
Maximum Connectable Indoor Unit*1				15	16	17	21	24	32	32	32	35
Indoor unit connectable capacity	Cooling	kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.4-67.2	25.2-75.6	28.0-83.9	30.8-92.3	33.5-100.5	
Power source				3-phase 4 wire, 400 V, 50Hz								
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	
	Heating		25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0	
Input power	Cooling	kW	5.51	7.73	9.62	11.53	14.17	13.24	15.13	17.35	19.24	
	Heating		5.72	7.83	9.28	11.45	12.60	13.55	15.00	17.11	18.56	
EER	Cooling	W/W	4.07	3.62	3.48	3.47	3.18	3.81	3.69	3.54	3.48	
COP	Heating		4.37	4.02	4.04	3.93	3.97	4.17	4.17	4.03	4.04	
Air flow rate	High	m³/h	11,100	11,100	11,100	13,000	13,000	11,100 x 2	11,100 x 2	11,100 x 2	11,100 x 2	
Sound pressure level*2	Cooling	dB (A)	56	58	58	60	61	60	60	61	61	
	Heating		58	59	60	61	61	62	62	63	63	
Maximum external static pressure		Pa	80	80	80	80	80	80	80	80	80	
Compressor motor output		kW	3.9	3.9	3.9 + 4.5	3.9 + 4.5	3.9 + 4.5	3.9 x 2	3.9 x 2 + 4.5	3.9 x 2 + 4.5	3.9 x 2 + 4.5	3.9 x 2 + 4.5 x 2
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930	930	930	1,240	1,240	930 x 2	930 x 2	930 x 2	930 x 2	930 x 2
	Depth	mm	765	765	765	765	765	765	765	765	765	765
Weight		kg	220	220	275	296	296	220 + 220	275 + 220	275 + 220	275 + 220	275 + 275
Refrigerant charge		kg	11.2	11.2	11.8	11.8	11.8	11.2 x 2	11.8 + 11.2	11.8 + 11.2	11.8 + 11.2	11.8 x 2
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88
	Gas		22.20	22.20	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92
Operation range	Cooling	°C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Energy Efficiency Combination

Rating Capacity range			HP	16	22	24	26	28	30	
										
Model name				AJY144LALHH	AJY198LALHH	AJY216LALHH	AJY234LALHH	AJY252LALHH	AJY270LALHH	
Unit 1				AJYA72LALH	AJY126LALH	AJYA72LALH	AJYA90LALH	AJY108LALH	AJY126LALH	
Unit 2				AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA72LALH	
Unit 3										
Maximum Connectable Indoor Unit*1				30	33	36	39	42	45	
Indoor unit connectable capacity			Cooling	kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2
Power source			3-phase 4 wire, 400 V, 50Hz							
Capacity	Cooling	kW		44.8	62.4	67.2	72.8	78.3	84.8	
	Heating			50.0	70.0	75.0	81.5	87.5	95.0	
Input power	Cooling	kW		11.02	17.04	16.53	18.75	20.64	22.55	
	Heating			11.44	17.17	17.16	19.27	20.72	22.89	
EER	Cooling	W/W		4.07	3.66	4.07	3.88	3.79	3.76	
COP	Heating			4.37	4.08	4.37	4.23	4.22	4.15	
Air flow rate	High	m³/h		11,100 x 2	13,000 + 11,100	11,100 x 3	11,100 x 3	11,100 x 3	13,000 + 11,000 x 2	
Sound pressure level*2	Cooling	dB (A)		59	61	61	62	62	63	
	Heating			59	62	61	62	63	63	
Maximum external static pressure		Pa		80	80	80	80	80	80	
Compressor motor output		kW		3.9 x 2	3.9 x 2 + 4.5	3.9 x 3	3.9 x 3	3.9 x 3 + 4.5	3.9 x 3 + 4.5	
Heat exchanger fin				Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	
Dimensions	Height	mm		1,690	1,690	1,690	1,690	1,690	1,690	
	Width	mm		930 x 2	930 + 1,240	930 x 3	930 x 3	930 x 3	930 x 2 + 1,240	
	Depth	mm		765	765	765	765	765	765	
Weight		kg		220 + 220	296 + 220	220 + 220 + 220	220 + 220 + 220	275 + 220 + 220	296 + 220 + 220	
Refrigerant charge		kg		11.2 x 2	11.8 + 11.2	11.2 x 3	11.2 x 3	11.8 + 11.2 x 2	11.8 + 11.2 x 2	
Connection pipe diameter	Liquid	mm		12.70	15.88	15.88	15.88	15.88	19.05	
	Gas			28.58	34.92	34.92	34.92	34.92	34.92	
Operation range	Cooling	°C		-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	
	Heating			-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	








Note : Specifications are based on the following conditions.







Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

When cooling operation will be conducted at outdoor air temperature below -5°C, the outdoor unit must be installed in a position that is higher than or equal to those of indoor units.

26	28	30	32	34	36	38	40	42	44	46	48
											
AJY234LALH	AJY252LALH	AJY270LALH	AJY288LALH	AJY306LALH	AJY324LALH	AJY342LALH	AJY360LALH	AJY378LALH	AJY396LALH	AJY414LALH	AJY432LALH
AJY126LALH	AJY144LALH	AJY144LALH	AJY144LALH	AJY108LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJY144LALH	AJY144LALH	AJY144LALH	AJY144LALH
AJY108LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJY108LALH	AJY108LALH	AJY108LALH	AJY108LALH	AJY126LALH	AJY144LALH	AJY144LALH	AJY144LALH
39	42	45	48	48	48	48	48	48	48	48	48
36.8-110.3	39.3-117.8	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.8	53.5-160.5	56.0-168.0	59.3-177.8	61.8-185.3	65.0-195.0	67.5-202.5
3-phase 4 wire, 400 V, 50Hz											
73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
82.5	87.5	95.0	100.0	106.5	112.5	120.0	125.0	132.5	137.5	145.0	150.0
21.15	23.79	25.70	28.34	26.97	28.86	30.77	33.41	35.32	37.96	39.87	42.51
20.73	21.88	24.05	25.20	26.39	27.84	30.01	31.16	33.33	34.48	36.65	37.80
3.48	3.30	3.31	3.18	3.52	3.48	3.48	3.35	3.36	3.25	3.26	3.18
3.98	4.00	3.95	3.97	4.04	4.04	4.00	4.01	3.98	3.99	3.96	3.97
13,000 + 11,100	13,000 + 11,100	13,000 x 2	13,000 x 2	11,100 x 3	11,100 x 3	13,000 + 11,100 x 2	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
62	63	64	64	63	63	64	64	65	65	65	66
64	64	64	64	64	65	65	65	65	65	66	66
80	80	80	80	80	80	80	80	80	80	80	80
3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
930 + 1,240	930 + 1,240	1,240 x 2	1,240 x 2	930 x 3	930 x 3	930 x 2 + 1,240	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765	765	765	765	765	765	765
296 + 275	296 + 275	296 + 296	296 + 296	275 + 275 + 220	275 + 275 + 275	296 + 275 + 275	296 + 275 + 275	296 + 296 + 275	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

32	34	36	40	42	44
					
AJY288LALHH	AJY306LALHH	AJY324LALHH	AJY360LALHH	AJY378LALHH	AJY396LALHH
AJY108LALH	AJY126LALH	AJY126LALH	AJY126LALH	AJY126LALH	AJY144LALH
AJY108LALH	AJY108LALH	AJY126LALH	AJY126LALH	AJY126LALH	AJY126LALH
AJYA72LALH	AJYA72LALH	AJYA72LALH	AJYA108LALH	AJY126LALH	AJY126LALH
48	48	48	48	48	48
44.7-134.1	48.0-143.8	51.2-153.6	56.8-170.2	60.0-180.0	62.5-187.5
3-phase 4 wire, 400 V, 50Hz					
89.4	95.9	102.4	113.5	120.0	125.0
100.0	107.5	115.0	127.5	135.0	140.0
24.75	26.66	28.57	32.68	34.59	37.23
24.28	26.45	28.62	32.18	34.35	35.50
3.61	3.60	3.58	3.47	3.47	3.36
4.12	4.06	4.02	3.96	3.93	3.94
11,100 x 3	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
62	63	64	64	65	65
64	64	65	65	66	66
80	80	80	80	80	80
3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690
930 x 3	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765
275 + 275 + 220	296 + 275 + 220	296 + 296 + 220	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3
19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

*1 Minimum connectable indoor unit number is 2.





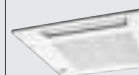




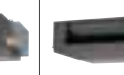












However ARXC72 and ARXC90 can be used signal connection.















*2 The noise value is the value when measured in an anechoic room.

When measured in the actual installed state, surrounding noise and reflections are received and the measured value is usually larger than the indicated value.

* : Data were not available at time of publication.

Indoor units lineup

Capacity range (kW)	2.20	2.80	3.60	4.50	5.60	
Model code	7	9	12	14	18	
Compact Cassette	 AUXB07LALH	 AUXB09LALH	 AUXB12LALH	 AUXB14LALH	 AUXB18LALH	
Cassette					 AUXD18LALH	
Compact Duct	 ARXB07LALH	 ARXB09LALH	 ARXB12LALH	 ARXB14LALH	 ARXB18LALH	
Low Static Pressure Duct						
Duct						
High Static Pressure Duct						
Floor / Ceiling			 ABYA12LATH	 ABYA14LATH	 ABYA18LATH	
Ceiling						
Compact Wall Mounted (EEV internal)	 ASYA07LACH	 ASYA09LACH	 ASYA12LACH	 ASYA14LACH		
Compact Wall Mounted (EEV external)	 ASYE07LACH	 ASYE09LACH	 ASYE12LACH	 ASYE14LACH		
	With this model, connection of EV kit is necessary.					
Wall Mounted				 ASYA18LATH	 ASYA24LATH	

	7.10 24	9.00 30	11.2 36	12.5 45	14.0 54	18.0 60	22.4 72	25.0 90
 AUXB24LALH								
 AUXD24LALH	 AUXA30LALH	 AUXA36LALH	 AUXA45LALH	 AUXA54LALH				
 ARXB24LATH	 ARXB30LATH	 ARXB36LATH	 ARXB45LATH					
 ARXA24LATH	 ARXA30LATH	 ARXA36LATH	 ARXA45LATH					
		 ARXC36LATH	 ARXC45LATH		 ARXC60LATH	 ARXC72LATH	 ARXC90LATH	
 ABYA24LATH								
	 ABYA30LATH	 ABYA36LATH	 ABYA45LATH	 ABYA54LATH				
 ASYA30LATH								

Indoor units specifications

Compact Cassette



Model name			AUXB07LALH	AUXB09LALH	AUXB12LALH	AUXB14LALH	AUXB18LALH	AUXB24LALH
Power source			230V-50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High	m³/h	540	550	600	680	710	1,030
	Med		450	450	530	590	580	830
	Low		350	350	390	390	400	450
Sound pressure level	High	dB(A)	34	35	37	38	41	50
	Med		30	30	34	34	35	44
	Low		25	25	27	27	27	30
Dimensions (H x W x D)		mm	245 x 570 x 570					
Weight		kg	15				17	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52	
	Gas (Flare)		ø12.70				ø15.88	
	Drain		ø25 (I.D.) ; ø32 (O.D.)					
Grille(option)	Model name		UTG-UFYC-W					
	Dimensions (H x W x D)		50 x 700 x 700					
	Weight		2.6					

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Cassette



Model name			AUXD18LALH	AUXD24LALH	AUXA30LALH	AUXA36LALH	AUXA45LALH	AUXA54LALH
Power source			230V-50Hz					
Capacity	Cooling	kW	5.6	7.1	9.0	11.2	12.5	14.0
	Heating		6.3	8.0	10.0	12.5	14.0	16.0
Input power		W	39	46	59	80	99	119
Airflow rate	High	m³/h	1,150	1,280	1,600	1,800	1,900	2,000
	Med		940	1,040	1,300	1,300	1,370	1,370
	Low		870	870	1,000	1,000	1,000	1,000
Sound pressure level	High	dB(A)	36	38	40	44	46	47
	Med		30	33	38	38	39	39
	Low		29	29	31	31	31	31
Dimensions (H x W x D)		mm	246 x 840 x 840			288 x 840 x 840		
Weight		kg	23			27		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52					
	Gas (Flare)		ø15.88			ø19.05		
	Drain		ø25 (I.D.) ; ø32 (O.D.)					
Grille(option)	Model name		UTG-UGYA-W					
	Dimensions (H x W x D)		50 x 950 x 950					
	Weight		kg 5.5					

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Compact Duct Low Static Duct Duct



Model name			ARXB07 LALH	ARXB09 LALH	ARXB12 LALH	ARXB14 LALH	ARXB18 LALH	ARXB24 LATH	ARXB30 LATH	ARXB36 LATH	ARXB45 LATH	ARXA24 LATH	ARXA30 LATH	ARXA36 LATH	ARXA45 LATH
Power source			230V~, 50Hz												
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	12.5	7.1	9.0	11.2	12.5
	Heating		2.8	3.2	4.1	5.0	6.3	8.0	10.0	12.5	14.0	8.0	10.0	12.5	14.0
Input power		W	46	55	63	90	96	145	198	253	338	190	188	312	312
Airflow rate	High	m³/h	370	440	590	800	890	1,100	1,410	1,710	1,970	1,280	1,280	1,720	1,720
	Med		310	370	500	750	810	920	1,280	1,600	1,790	1,210	1,210	1,670	1,670
	Low		280	340	450	700	730	810	1,150	1,470	1,670	1,130	1,130	1,600	1,600
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50	0 to 80	0 to 80	0 to 80	0 to 80	30 to 150	30 to 150	30 to 150	30 to 150
Standard static pressure			25	25	25	25	25	40	50	50	60	100	100	100	100
Sound pressure level	High	dB(A)	29	31	30	33	36	31	34	37	41	38	40	43	43
	Med		26	29	28	32	34	27	32	35	38	36	38	41	41
	Low		24	27	25	30	30	25	29	33	36	34	36	39	39
Dimensions (H x W x D)		mm	217 x 663 x 595		217 x 953 x 595			270x1,135x700				270x1,135x700			
Weight		kg	18		25			43		45		43		45	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52		ø9.52			ø9.52			
	Gas (Flare)		ø12.70			ø15.88		ø15.88		ø19.05		ø15.88		ø19.05	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				ø25 (I.D.) ; ø32 (O.D.)				ø25 (I.D.) ; ø32 (O.D.)				

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

High Static Pressure Duct



Model name			ARXC36LATH	ARXC45LATH	ARXC60LATH	ARXC72LATH	ARXC90LATH
Power source			230 V-, 50Hz				
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0
	Heating		12.5	14.0	20.0	25.0	28.0
Input power		W	405	427	427	1,110	1,250
Airflow rate	High	m³/h	2,600	3,500	3,500	3,900	4,300
	Med		1,950	3,000	3,000	3,300	4,000
	Low		1,450	2,460	2,460	3,000	3,500
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	50 to 300	50 to 300
Standard static pressure			100	100	100	260	250
Sound pressure level	High	dB(A)	45	49	49	51	53
	Med		38	45	45	48	51
	Low		32	42	42	45	49
Dimensions (H x W x D)		mm	400 x 1,050 x 500			450 x 1,550 x 700	
Weight		kg	45		50	82	82
Connection pipe diameter	Liquid	mm	ø9.52 (Flare)			ø12.70 (Brazing)	
	Gas		ø19.05 (Flare)			ø22.22(Brazing)	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Indoor units specifications

Floor / Ceiling



Model name			ABYA12LATH	ABYA14LATH	ABYA18LATH	ABYA24LATH
Power source			230V~, 50Hz			
Capacity	Cooling	kW	3.6	4.0	5.6	7.1
	Heating		4.1	4.5	6.3	8.0
Input power		W	57	57	88	88
Airflow rate	High	m³/h	600	600	780	880
	Med		500	500	650	740
	Low		480	480	550	630
Sound pressure level	High	dB(A)	40	40	46	48
	Med		37	37	41.5	44
	Low		34	34	37	40
Dimensions (H x W x D)		mm	199 x 990 x 655			
Weight		kg	28			
Connection pipe diameter	Liquid (Flare)	mm	ø6.35		ø9.52	
	Gas (Flare)		ø12.70		ø15.88	
	Drain		ø25 (I.D.) : ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Ceiling



Model name			ABYA30LATH	ABYA36LATH	ABYA45LATH	ABYA54LATH
Power source			230V~, 50Hz			
Capacity	Cooling	kW	9.0	11.2	12.5	14.0
	Heating		10.0	12.5	14.0	16.0
Input power		W	124	144	160	180
Airflow rate	High	m³/h	1,450	1,660	1,850	2,200
	Med		1,280	1,500	1,660	2,000
	Low		980	1,270	1,430	1,800
Sound pressure level	High	dB(A)	42	45	48	52
	Med		39	42	46	50
	Low		35	37	41	46
Dimensions (H x W x D)		mm	240 x 1,660 x 700			
Weight		kg	48			
Connection pipe diameter	Liquid (Flare)	mm	ø15.88		ø9.52	
	Gas (Flare)		ø19.05			
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Compact Wall Mounted



Model name			ASYA07LACH	ASYA09LACH	ASYA12LACH	ASYA14LACH	ASYE07LACH	ASYE09LACH	ASYE12LACH	ASYE14LACH
Power source			230V-, 50Hz				230V-, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	2.2	2.8	3.6	4.5
	Heating		2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0
Input power		W	16	16	19	30	15	16	20	28
Airflow rate	High	m³/h	490	500	560	670	490	500	560	680
	Med		450	450	480	490	450	450	480	490
	Low		370	370	420	420	370	370	420	420
Sound pressure level	High	dB(A)	35	36	39	44	34	35	38	43
	Med		33	33	35	37	32	32	34	35
	Low		27	27	31	32	26	26	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215				275 x 790 x 215			
Weight		kg	9				9			
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø6.35			
	Gas (Flare)		ø12.70				ø12.70			
	Drain		ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)				ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)			
EV Kit (option)			-				UTR-EV09XB		UTR-EV14XB	

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Wall Mounted



Model name			ASYA18LATH	ASYA24LATH	ASYA30LATH
Power source			230V~, 50Hz		8.0
Capacity	Cooling	kW	5.6	7.1	8.8
	Heating		6.3	8.0	73
Input power		W	63	74	980
Airflow rate	High	m³/h	870	940	870
	Med		700	720	750
	Low		540	600	45
Sound pressure level	High	dB(A)	43	45	42
	Med		37	39	39
	Low		30	33	
Dimensions (H x W x D)		mm	320 x 1,120 x 220		
Weight		kg	16		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52		
	Gas (Flare)		ø15.88		
	Drain		ø12 (I.D.) ; ø16 (O.D.)		

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.









Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Control Systems Lineup

Type			Split	Multi	VRF			
					J	S	V	V-II
Individual control system	Wired Remote Controller		● UTB-YUD	● UTB-YUD	● UTB-YUB	● UTB-YUB	● UTB-YUB	● UTY-RNKY
	Simple Remote Controller		● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTB-YPB	● UTY-RSKY
	Simple Remote Controller (Without master control)		—	—	● UTB-YRA	● UTB-YRA	● UTB-YRA	● UTY-RHKY
	Wireless Remote Controller		● UTB-YNA	● UTB-YNA	Accessory	● UTB-YVB	● UTB-YVB	● UTY-LNHY
	IR Receiver Unit		● UTY-LRHY1	● UTY-LRHY1	Accessory	● UTB-YWA	● UTB-YWA	● UTB-YWB
	IR Receiver Kit		● UTY-LRHYA1 With wireless remote controller	● UTY-LRHYA1 With wireless remote controller	—	—	—	● UTY-LRHYB1
Centralized control system	Group Remote Controller		—	—	● UTB-YDB	● UTB-YDB	● UTB-YDB	● UTY-CGGY
	Central Remote Controller		—	—	—	● UTB-YCA	● UTB-YCA	—
	Touch panel Controller		—	—	—	—	—	● UTY-DTGY
	System Controller		—	—	—	● UTY-APGX	● UTY-APGX	● UTY-APGX
Adaptor & Converter	Transmission Adaptor		—	—	—	● UTR-YTMA UTR-YTMB	● UTR-YTMA UTR-YTMB	—
	Network Converter		—	—	● UTR-YGCA	● UTR-YRDA	● UTR-YRDA	● UTY-VGGX
	Network Converter for LONWORKS®		—	—	—	● UTR-YLLA	● UTR-YLLA	● UTY-VLGX
	BACnet® Gateway		—	—	—	● UTR-YLBA UTY-ABGX	● UTR-YLBA UTY-ABGX	● UTY-ABGX
	Signal Amplifier		—	—	—	● UTY-VSGX UTR-YRPC	● UTY-VSGX UTR-YRPC	● UTY-VSGX
	External Switch Controller		—	—	● UTR-YESA	● UTR-YESA	● UTR-YESA	● UTY-TEKX
Service & Maintenance	Service Tool		—	—	—	● UTY-ASGX UTR-YSTC	● UTY-ASGX UTR-YSTC	● UTY-ASGX
	Web Monitoring Tool		—	—	—	● UTY-AMGX UTR-YMSA	● UTY-AMGX UTR-YMSA	● UTY-AMGX

Comparison table of Controllers

Type	Individual control				Centralized control			
	Wired Remote Controller	Simple Remote Controller	Simple ^{*1} Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller (Software)
Model name								
	UTB-YUD UTB-YUB UTY-RNKY	UTB-YPB UTY-RSKY	UTB-YRA UTY-RHKY	UTB-YNA UTB-YVB UTY-LNHY	UTB-YDB UTY-CGGY	UTB-YCA	UTY-DTGY	UTY-APGX
Max. controllable remote controller groups	1	1	1	1	8	400	400	1600
Max. controllable indoor units	16	16	16	16	96	400	400	1600
Max. controllable groups	-	-	-	-	-	64	400	1600
Air conditioning control function	On / Off	●	●	●	●	●	●	●
	Operating mode setting	●	●	-	●	●	●	●
	Fan speed setting	●	●	●	●	●	●	●
	Room temp. setting	●	●	●	●	●	●	●
	Room temp. set point limitation	-	-	-	-	-	●	●
	Test operation	●	●	-	●	-	●	-
	Up/down air direction flap setting	●	-	-	●	-	●	●
	Right/left air direction flap setting	●	-	-	●	-	●	●
	Group setting	-	-	-	-	●	●	●
	RC prohibition	-	-	-	-	●	●	●
	Anti freeze setting	-	-	-	-	●	●	●
	Economy mode setting	●	-	-	● / - ^{*3}	-	●	●
Display	Failure	●	●	●	-	●	●	●
	Defrosting	●	●	●	-	-	●	●
	Current time	●	-	-	●	●	●	●
	Day of week	●	-	-	-	●	●	●
	R.C. prohibition	●	●	●	-	-	●	●
	Cooling/heating priority	●	●	●	-	●	●	●
	Address display	●	●	●	-	●	●	●
Timer	System schedule timer	-	-	-	-	-	●	●
	On/off per day	-	-	-	-	-	20	72
	On/off per week	-	-	-	-	-	140	504
	Weekly timer	●	-	-	-	●	-	-
	On/off per day	2	-	-	-	2	-	-
	On/off per week	14	-	-	-	14	-	-
	On/off timer	●	-	-	●	-	-	-
	Sleep timer	-	-	-	●	-	-	-
	Program timer	-	-	-	●	-	-	-
	Day off	●	-	-	-	●	●	●
Control	Min. unit of timer setting(Minutes)	30	-	-	5	10	10	10
	Status monitoring system	-	-	-	-	-	●	●
	Electricity charge calculation	-	-	-	-	-	-	●
	Error history	●	●	●	-	●	●	●
	Emergency stop	-	-	-	-	-	● ^{*2}	-
	Control via internet	-	-	-	-	-	-	●
	E-mail notification for malfunction	-	-	-	-	-	-	●

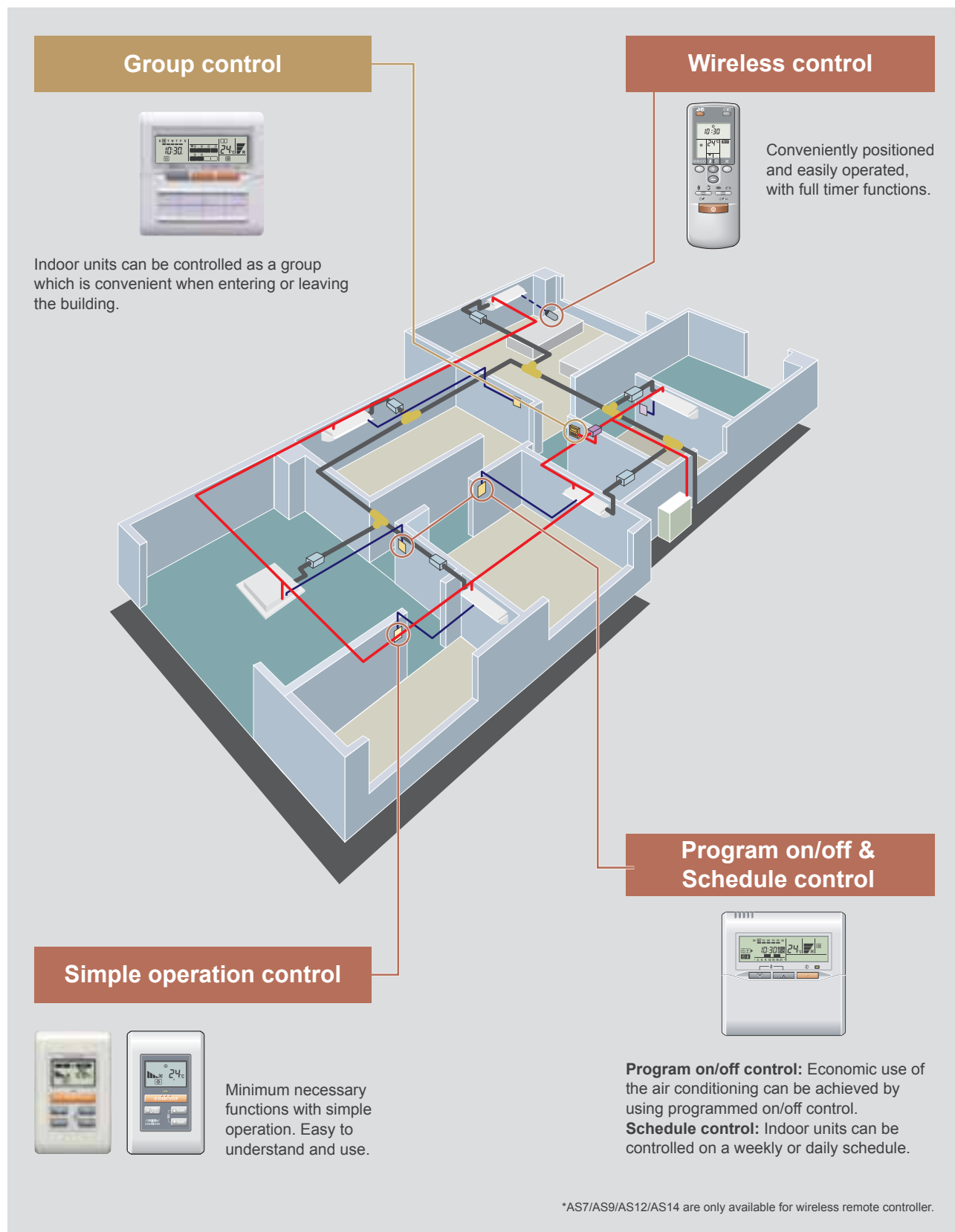
*1 "Master control" setting is not available for this model.

*2 This function is available only through external input. control.

*3 For UTB-YVB, this function is not available.

System function

Five types of controllers are available to meet the varied needs of the building and the user. Tighter control over the air conditioned environment can be achieved by combining group remote controller which can operate all the indoor units at the same time, a wired remote controller with a weekly or daily schedule, a wireless remote controller and a simple remote controller.

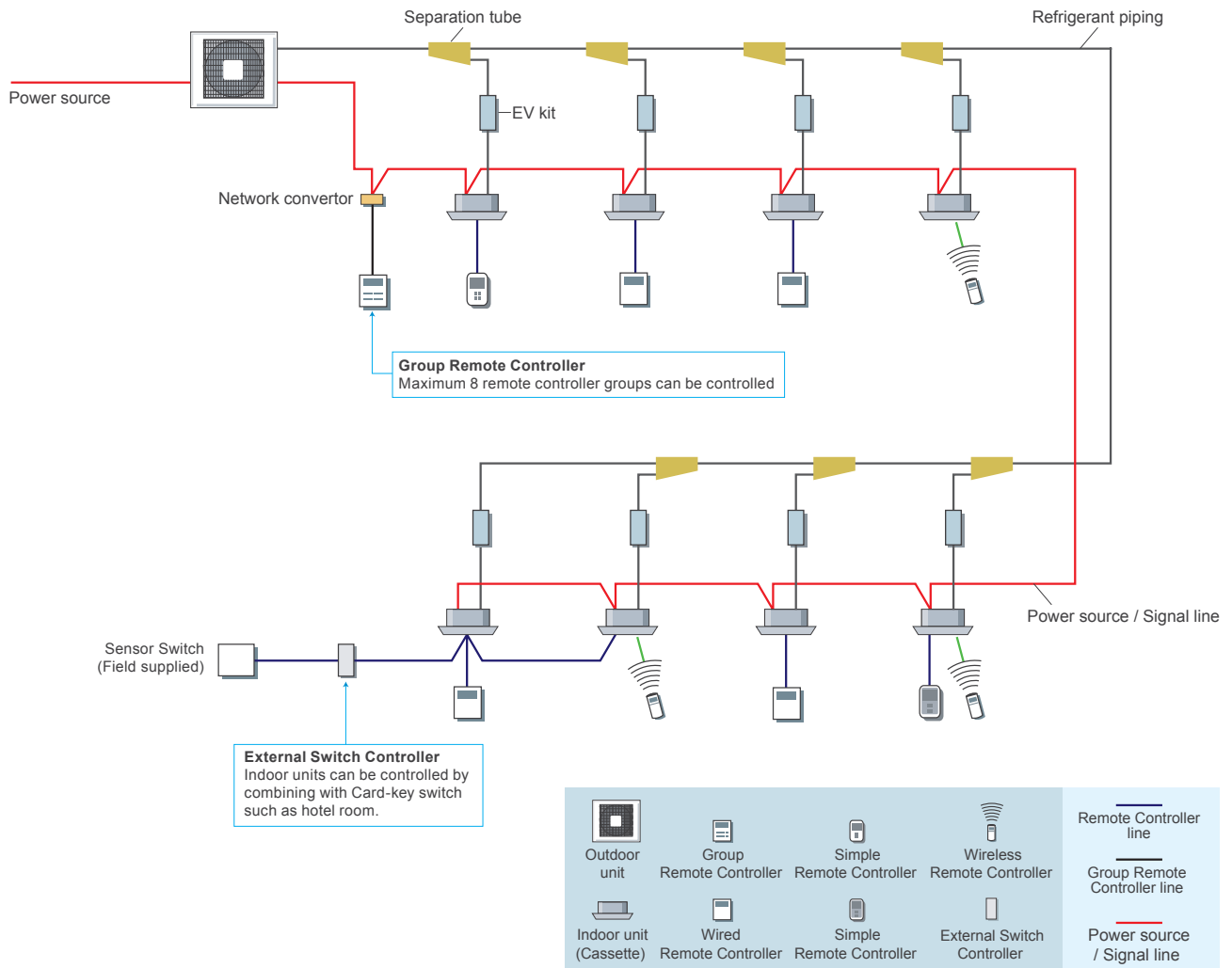


System diagram

Max. connectable
8
indoor units

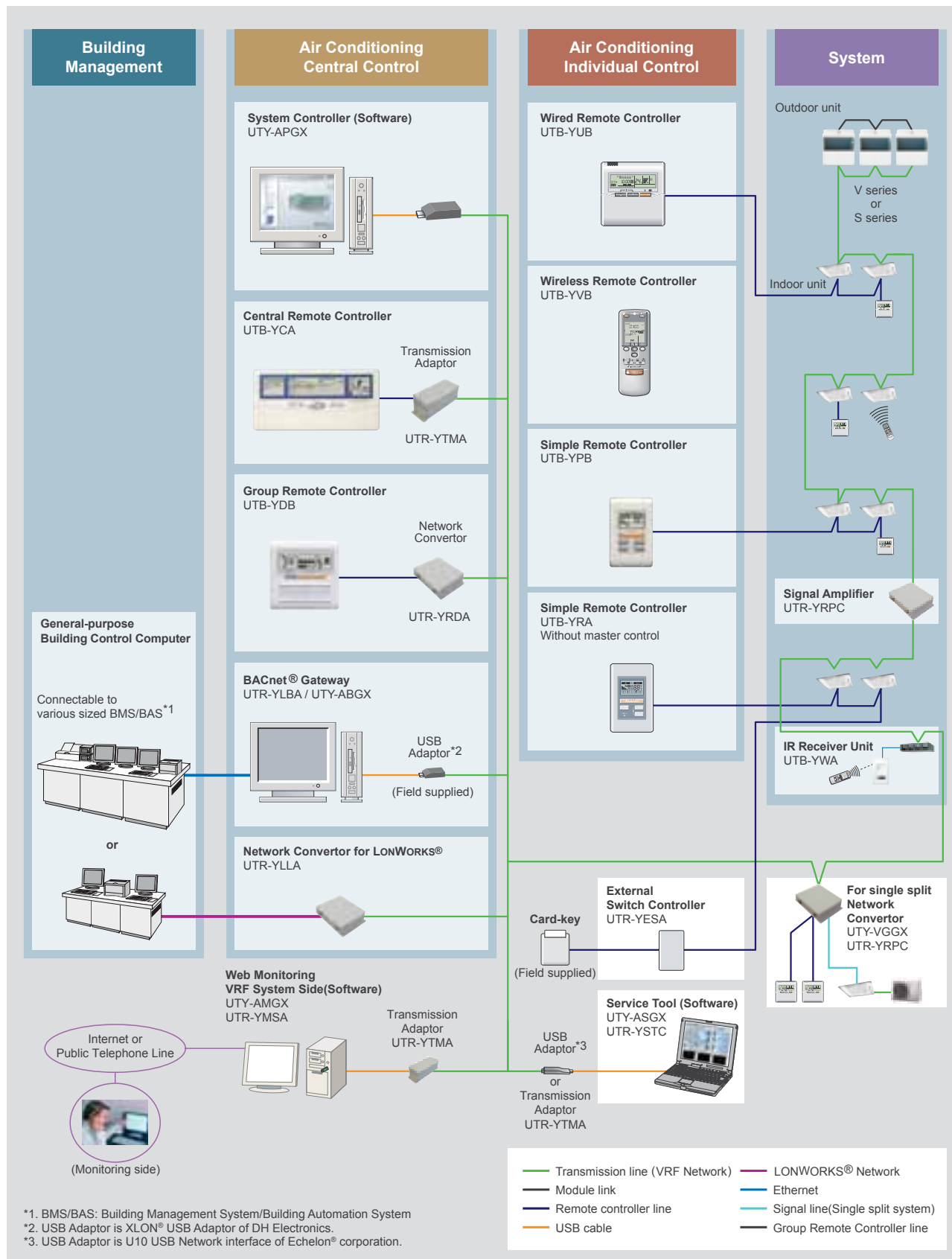
Max. piping length
70_m

Max. total signal line
150_m



System diagram

It supports every user's needs by offering a variety of control systems available, such as individual control, central control and building management system control options



Wiring system

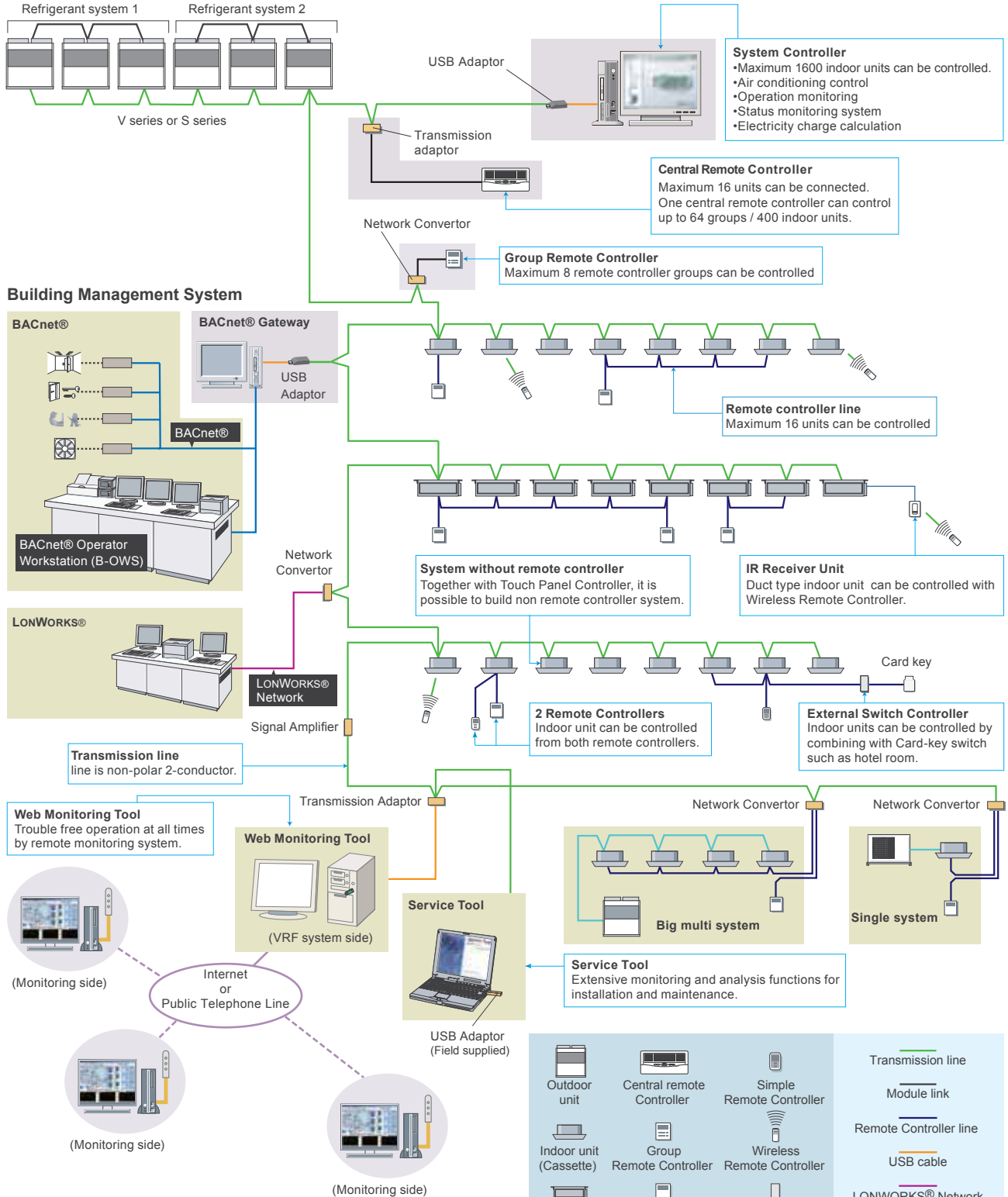
Max. connectable
100
outdoor units

Max. connectable
400
indoor units

Max. transmission
line length
1,000m
for S series

Max. transmission
line length
2,000m
for V series

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 2000m (by using signal amplifiers).



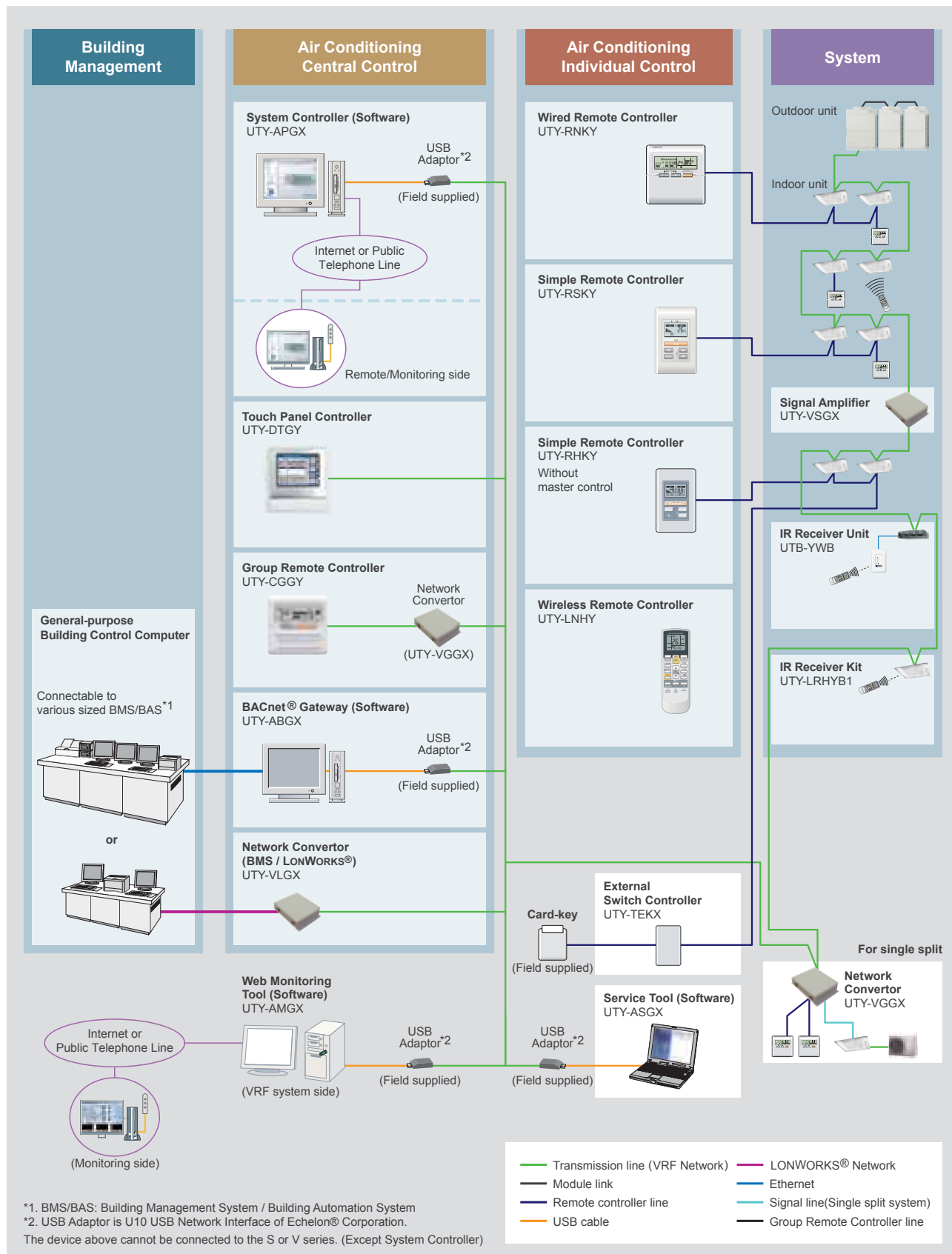
Combination of individual remote controller

Wired, Simple and Wireless Remote Controllers can be used jointly.

Control Systems for V-II series

System diagram

The V-II system supports every users needs by offering a variety of Control systems, including individual control, central control and building management control options.



Controller

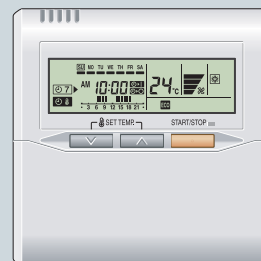
Wired Remote Controller

UTB-YUD/UTB-YUB/UTY-RNKY

The room temperature can be controlled by detecting the temperature accurately from the built-in sensor

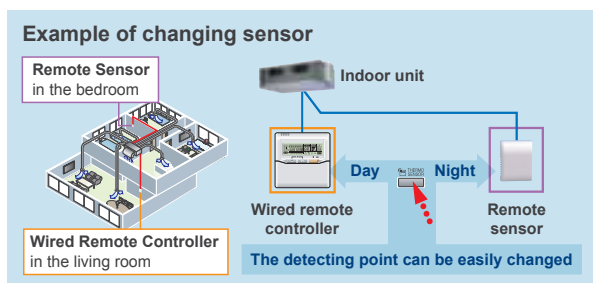
- Simple operation with Built-in Weekly / Daily Timer.
- Control up to 16 indoor units.
- Up to 2 wired remote controllers can be connected to a single indoor unit.

Max. controllable
16
indoor units



Accurate and comfortable

Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller. This new wired remote controller and the optional remote sensor allows flexibility in sensor location, suitable for all requirements.



Displayed temperature is set temperature.

Built-in timers

Weekly timer: Possible to set ON/OFF time to operate twice each day of the week.

Setback timer: Possible to set temperature for two times spans and for each day of the week.

At "Weekly timer" + "Set back timer" setup

Diagnosis check function

Two methods are available for determining the cause of failure in the event of a malfunction occurs:

Simple installation

Components are compatible with standard switch boxes. Flat back surface allows to be installed wherever it is needed.

Simple Remote Controller

UTB-YPB/UTY-RSKY

UTB-YRA/UTY-RHKY (Without master control)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.

Max. controllable
16
indoor units



UTB-YPB/UTY-RSY UTB-YRA/UTY-RHKY
Without master control

User-friendly operation

- A large On / Off button is provided in the centre of the remote controller for easy operation.
- Background light enables easy operation in a darkened room.
- Following an error display, diagnostics can be carried out on the controller.



Functions

Model	UTB-YPB/UTY-RSKY	UTB-YRA/UTY-RHKY
On / Off	●	●
Fan control	●	●
Master control	●	— *1
Room temp. setting	●	●

*1: "Master control" setting is not available. It is recommend to use together with other type controller.

Specifications

Model name	UTB-YUD/UTB-YUB/UTY-RNKY	UTB-YPB/UTY-RSKY	UTB-YRA/UTY-RHKY
Power Source	DC 12V	DC 12V	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17	120 x 75 x 14	120 x 75 x 14
Weight (g)	160	90 (100 : UTY-RSKYT)	90 (100 : UTY-RHKYT)

DC12V is supplied by the indoor unit.

Wireless Remote Controller

UTB-YNA/UTB-YVB/UTY-LNHY

Simple and sophisticated operations
with a choice of 4 daily timers

•A single controller controls up to 16 indoor units.

Max. controllable
16
indoor units

Selectable
4
daily timers



UTB-YVB



UTB-YNA/UTY-LNHY

Built-in timers

Select from 4 different timer programs:

On / Off / Program / Sleep

Program timer: The program timer operates the ON and OFF timer once within a 24 hour period.

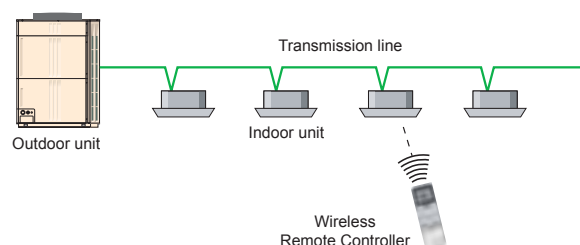
Sleep timer: The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.

Easy installation and operation

- Code selector switch prevents indoor unit mix-up. (Up to 4 codes can be set.)
- Wide and precise transmitting range.

System addressing

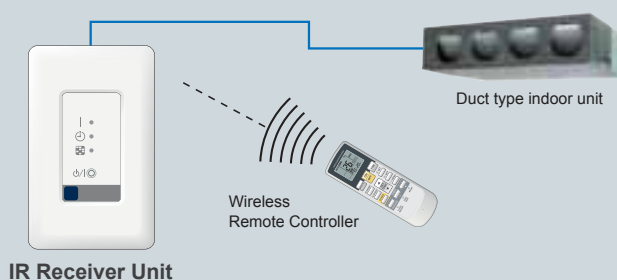
During installation work, system addressing can be performed using the Wireless Remote Controller, thus eliminating manual switch setting.



IR Receiver Unit

UTY-LRHY1/UTB-YWA/UTB-YWB

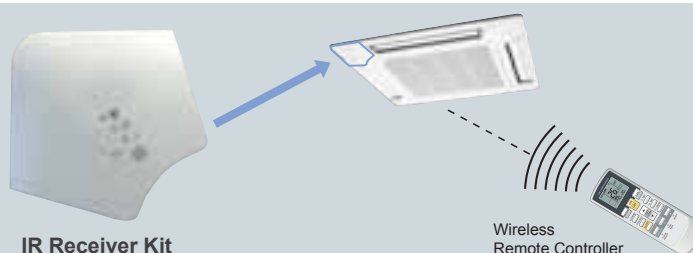
Necessary to control for all duct type by
Wireless Remote Controller



IR Receiver Kit

UTY-LRHYA1 UTY-LRHYB1

Cassette type indoor unit can be controlled
with Wireless Remote Controller



Specifications

Model name	UTB-YNA/UTB-YVB/UTY-LNHY	UTY-LRHY1/UTB-YWA/UTB-YWB	UTY-LRHYA1/UTY-LRHYB1
Battery	1.5V (R03 / LR03 / AAA) x 2	DC 12V	DC 12V
Dimensions (H x W x D) (mm)	158 x 56 x 20	122 x 60 x 26.5	213.8 x 213.8x 25.7
Weight (g)	70	150	140

Controller

Group Remote Controller

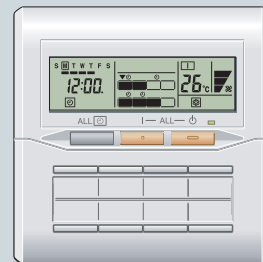
UTB-YDB / UTY-CGGY

Group control of indoor units with simple operation

- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Converter is required to connect Group Remote Controllers to a VRF network system.
- (Network Converter allows up to 4 Group Remote Controllers)

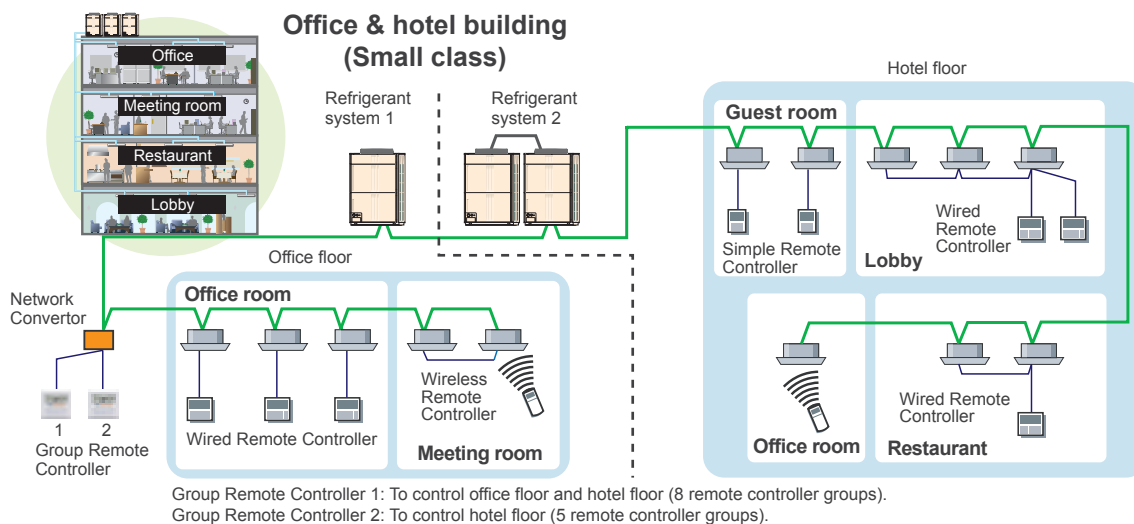
Max. controllable
64
group R.C. in a VRF
network system

Max. controllable
8
remote
controller groups



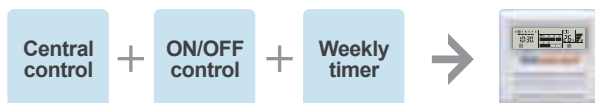
Control up to 8 remote controller groups

- Single Group Remote Controller controls and monitors up to 8 remote controller groups.



High performance and compact size

ON / OFF, Operating mode, Room temperature and Fan speed setting can be controlled / monitored centrally or individually.



Built-in weekly timers

The weekly timer is provided as a standard function.

1. The timer can be set up for up to 4 times per day. (On / Off, operating mode, set temperature)
2. Allows separate settings for each day of the week.

Specifications

Model name	UTB-YDB / UTY-CGGY
Power Source	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17
Weight (g)	200

DC12V is supplied by a network converter.

Central Remote Controller

UTB-YCA

Functionality in a compact housing with built-in weekly timer

- Up to 400 indoor units / 400 remote controller groups / 64 groups can be controlled by one system.
- Up to 16 central remote controllers can be connected into one system allowing operation and monitoring to be achieved from the central control room, at each floor, by each tenant, or in the plant room.

Max. controllable
400
indoor units

Max. controllable
400
remote controller groups

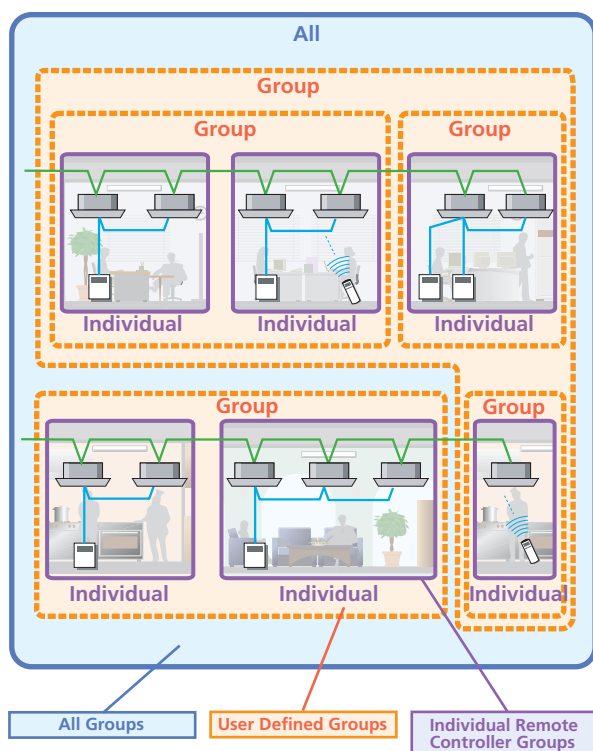
Max. controllable
64
groups



Control up to 400 indoor units

- The central remote controller performs system control after you select All Groups, User Defined Groups, or Individual Remote Controller Groups.
- Accurate control of functions such as Start / Stop, Operating Mode, Temperature, and Air Velocity ensures occupancy comfort.

Controllable method

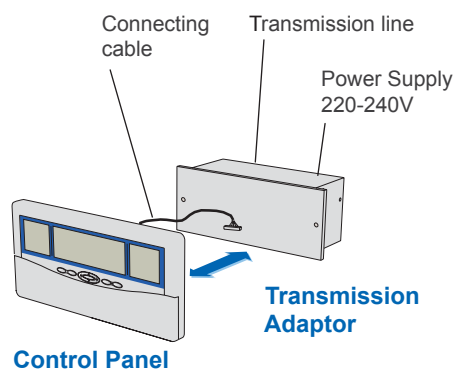


Central control

Any of 6 functions of the individual remote controller can be locked from the Central Remote Controller: all functions, timer mode, operating mode, temperature setting, filter reset, on/off. All functions can be controlled via the Central Remote Controller only.

Easy Installation

- The controller can be installed on any flat surface.
- The control panel and transmission adaptor can be installed separately.
- For flexibility in installation, the main unit can be built into the wall or exposed.



Functions

- Built-in weekly timer
- Memory functions
- Error display

Specifications

Model name	UTB-YCA	
	Control Panel	Transmission Adaptor
Power Source	DC 12V	220-240V 50-60Hz Single phase
Power Consumption (W)	4.8	
Fuse Capacity (A)	3	
Dimensions (H x W x D)(mm)	143 x 296 x 22	107 x 288 x 100
Weight (g)	550	1,300

PACKING LIST

Packing List	Control Panel / Transmission Adaptor / Connecting Cable
--------------	---

Controller

Touch Panel Controller

UTY-DTGY

- Large-sized 7.5-inch TFT color
- LCD Easy finger touch operation
- Stylish shape and design to suit all application
- No additional component is required for installation
- Up to 400 indoor units can be controlled
- Selectable 2 display types (Icon / List) in monitoring mode

7.5 inch
screen

Stylish
design

Max. controllable
400
indoor units



Easy operation

- Wide range of simple-to-understand icons
- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon
- Up-to-date status display
- Background color identifies current control operation blue for monitoring, green for operational control

Functions



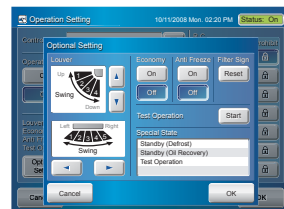
Individual control



Flexible grouping



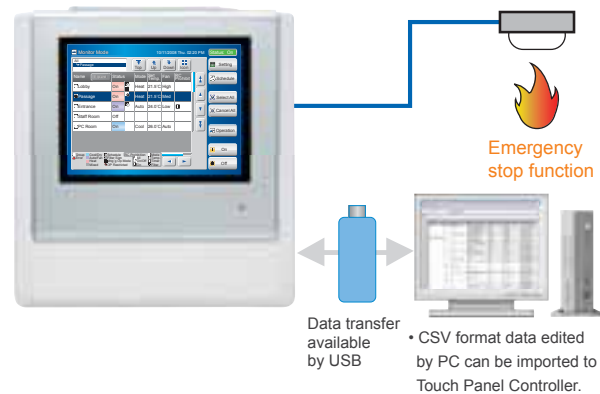
Schedule control



Indoor units operation monitoring

Versatility

- Emergency stop function: Air conditioner can be turned off through the external input control
- The stored data can be transferred via USB port
- CSV format data edited by PC can be imported to Touch Panel Controller.



Easy installation

- Touch Panel Controller is easily mounted to the wall.
- Flat back surface allows to be installed wherever it is needed.
- No additional component is required for installation.



Specifications

Model name	UTY-DTGY
Power Source	100-240V 50/60Hz
Dimensions (H x W x D) (mm)	260 x 246 x 54
Weight (g)	2,150
Interface	USB 2.0

System Controller

UTY-APGX

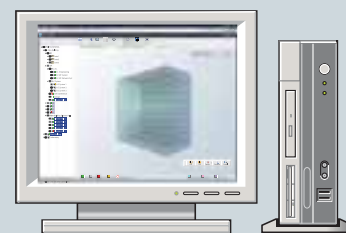
This system realizes the advanced general monitoring and control of VRF system from small scale buildings to large scale buildings.

- Supports VRF S series, V series and V-II series.

Max. controllable
4
VRF system

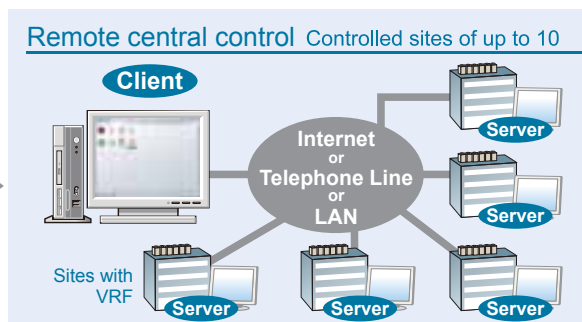
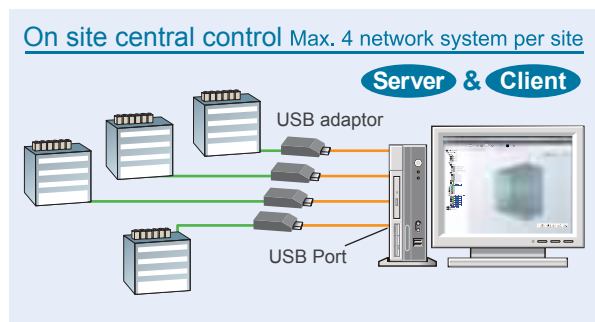
Max. controllable
400
outdoor units

Max. controllable
1,600
indoor units



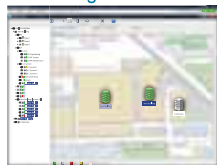
Remote centralized control

System controller may be used on site or remotely over various networks for remote central control. System controller requires 2 softwares working together. Server program runs in the background and communicate with VRF System. Client program provides user interface and communicate with the Server. Server and client program may run in a single PC or in different PCs separated by network. By using client software, one PC can perform central control and web control of 10 VRF system sites with max. 20 buildings per site.



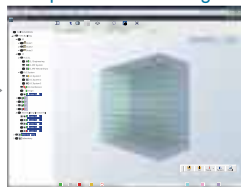
User friendly view and operation

Monitoring located site



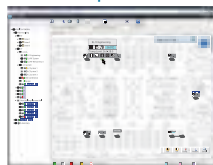
Monitor mode (Site)

Main operation monitoring screen

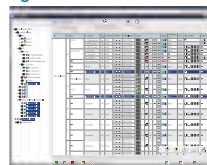


Monitor mode (Building)

Operation monitoring of each site

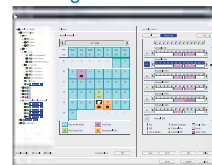


Monitor mode (Floor)



Monitor mode (List)

Management functions



Schedule setting

Functions

- Electricity charge calculation
- Error display
- Diverse control of indoor units
- Schedule control
- Operating & control record
- Energy saving function

Specifications

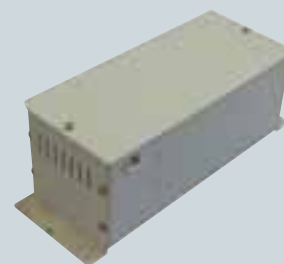
Personal Computer	AT compatible machine that runs Microsoft® Windows®
Operating System	Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later
CPU	Intel® Pentium® / Celeron 2GHz (Server), 1GHz (Client) or higher
HDD	40GB or more of free space (5GB for Client PC)
Memory	1GB or more
Interface	USB port is required for each of the followings for Server PC; -Wibu Key (Software protection key) - Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required for remote connection using internet.
Accelerator	Requires the internal graphics accelerator be compatible with Microsoft® DirectX® 9.0 or later.
PACKING LIST	
CD-ROM	Includes the software for System Controller. Both server and client software is included.

Adaptor & Converter

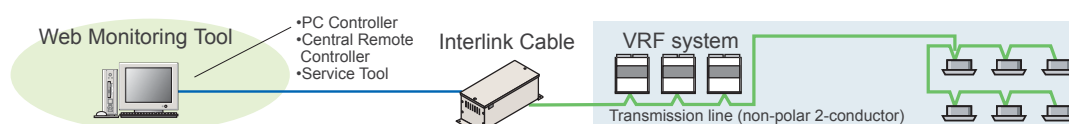
Transmission Adaptor

UTR-YTMA / UTR-YTMB

- For air conditioning of the medium and large size buildings, the control software can control and monitor air conditioners together with the ones in the other buildings.
- This device enables control by other equipment via an Interlink cable or connection cable.
- Up to 400 Indoor units / 100 Outdoor units can be connected to one Transmission Adaptor.



Installation example

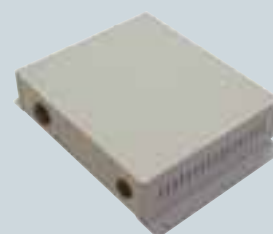


Network Converter

Max. controllable
16
Network
Converter units

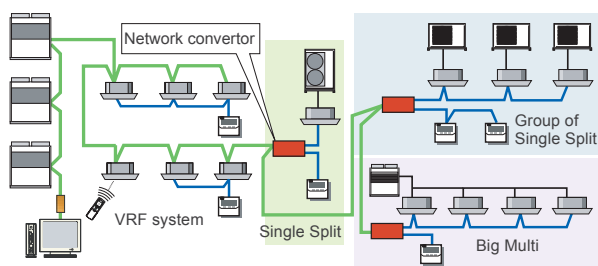
UTR-YRDA / UTY-VGGX / UTR-YGCA

- This network converter is to be used for connecting single split system or group remote controller with the VRF system.
- Please select the function by switching the dip switch during the installation.

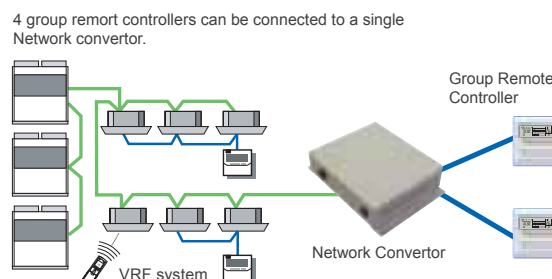


Installation example

- Split type systems can be controlled from a central remote controller or PC controller through connection to the VRF's network converter.
- Standard remote controller and central remote controller provide On / Off control, master control, temperature and fan control, etc.
- A single network converter can be used to connect and control up to 16 units.



Please consult your distributor for connectable split type air conditioner. Up to 100 network converters may be connected in a single VRF system. A single network converter is considered as a single refrigerant system, irrespective of the number of connected single models.



* 2 refrigerant circuits can be covered by a single network converter. Up to a total of 16 network converters and central remote controller adapters can be connected in a single VRF system.

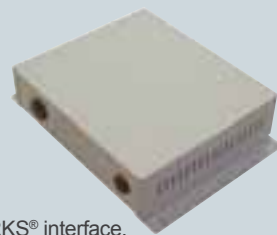
Specifications

Model name	UTR-YTMA / UTR-YTMB
Power Source	50-60Hz 220-240V
Power Consumption (W)	2.9
Fuse Capacity	3A
Dimensions (H X W X D) (mm)	100 x 288 x 110
Weight (g)	1,300

Model name	UTR-YRDA / UTY-VGGX / UTR-YGCA
Power Source	50-60Hz 220-240V
Power Consumption (W)	8.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

Network Convertor for LONWORKS®

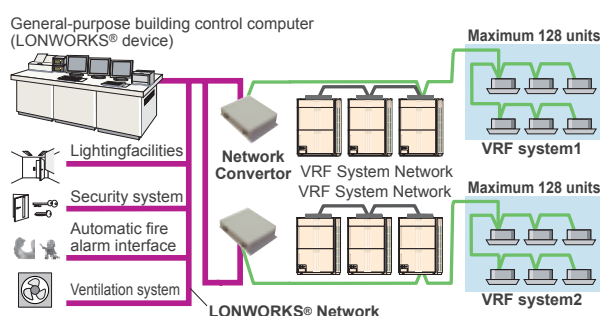
Max. controllable
128
indoor units



UTR-YLLA / UTY-VLGX (Future Release)

- For connection between VRF system and a LONWORKS® open network for management of small to medium-sized BMS and VRF systems.
- The UTY-VLGX permits central monitoring and control of a VRF system from a BMS through a LONWORKS® interface.
- Up to 128 Indoor units can be connected to one Network Convertor for LONWORKS®

Installation example



Transmission specifications (BMS side)

Transmission speed	78kbps
Transceiver	FTT-10A
Transmission way form	Free topology
Terminated resistor	None (It attaches at the terminal of a network.)

BACnet® Gateway

Software

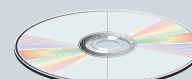
UTR-YLBA / UTY-ABGX (Future Release)

- The VRF system can be incorporated into a Building Management System.
- Enables central control of up to 1,600 indoor units through BACnet®, a global standard for open networks.
- Conforms to ANSI / ASHRAE Standards® 135-2001 BACnet® Application Specific Controller (B-ASC) BACnet® / IP over Ethernet.
- Connects up to 4 VRF systems (1,600 indoor units / 400 outdoor units) per gateway.

Max. controllable
4
VRF system

Max. controllable
400
outdoor units

Max. controllable
1,600
indoor units

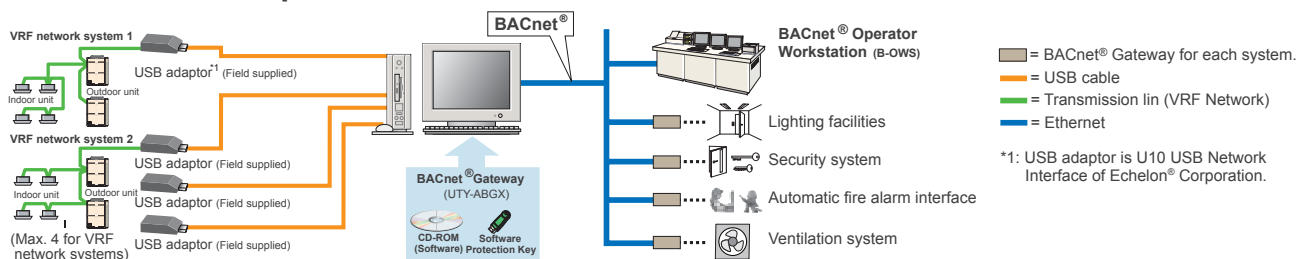


CD-ROM
(Software)

Software
Protection Key



Installation example



Specifications

Model name	UTR-YLLA / UTY-VLGX
Power Source	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

Personal Computer	AT compatible machine that runs Microsoft® Windows®
Operating System	Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later
CPU	Intel® Pentium® / Celeron 2GHz or higher
Memory	1GB (Vista) , 512MB (XP) or more
Interface	USB port is required for each of the followings; -Wibu Key (Software protection key) - Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required
Other Software Required	Adobe® Acrobat® reader 4.0 or later

PACKING LIST

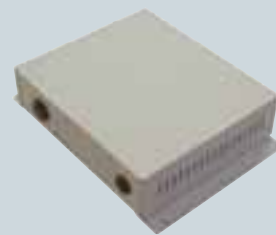
Packing List	CD-ROM / Wibu Key
--------------	-------------------

Adaptor & Convertor, Service & Maintenance

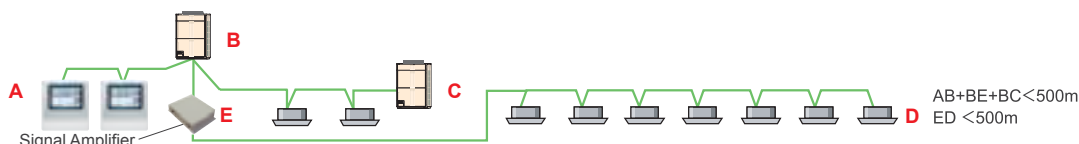
Signal Amplifier

UTR-YRPC / UTY-VSGX

- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 8 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,
 - (1) When the total wiring length of the transmission line exceeds 500m.
 - (2) When the total number of units on the transmission line exceeds 64.



Installation example

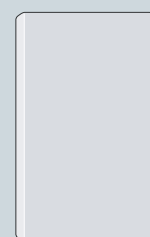


External Switch Controller

UTR-YESA / UTY-TEKX

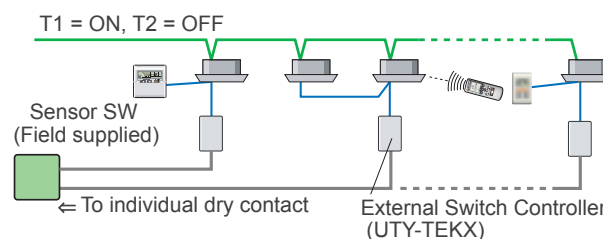
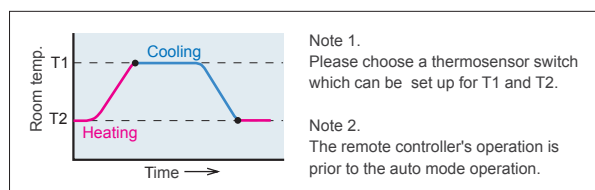
Air conditioner switching can be controlled by connecting other sensor switches

- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a field supplied parts.

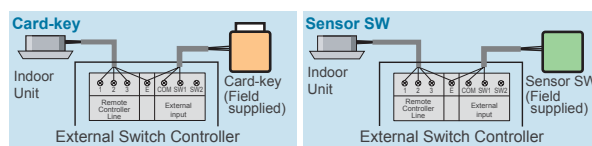


Installation example

- Auto mode operation, which switches the cooling and the heating automatically, is enabled by using the sensor switch and External Switch Controller.
- Note: All indoor units will operate in the same mode.



Electrical wiring



Specifications

Model name	UTR-YRPC / UTY-VSGX
Power Source	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H X W X D) (mm)	67 x 288 x 211
Weight (g)	1,500

Model name	UTR-YESA / UTY-TEKX
Power Source	DC 12V
Dimensions (H X W X D) (mm)	120 x 75 x 30
Weight (g)	90

DC12V is supplied by the indoor unit.

Service Tool Software

UTR-YSTC / UTY-ASGX

Extensive monitoring and analysis functions for installation and maintenance

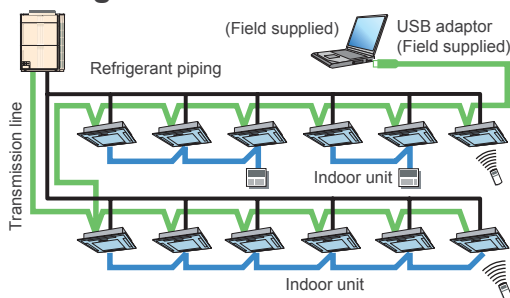
- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF system) can be controlled and monitored for large scale buildings or hotels
- This software can be connected to any point of transmission line with USB adaptor (field supplied).

Max. Monitor
and control
400
indoor units

Max. Monitor
and control
100
outdoor units



Wiring connection



Functions

•Equipment Detail (Diagram)



- Equipment Detail (List)
- Error History
- Remote File Download
- System List
- Commissioning Tool

Web Monitoring Tool Software

UTR-YMSA / UTY-AMGX

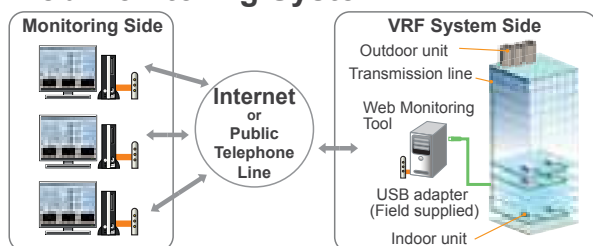
Product features

- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet*1.
- Requires either a dedicated internet connection* or public telephone line.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in offline mode of the service tool.
- Monitoring side computer is not required to install special software, requires only general web browser.

VRF system
can be supported
4

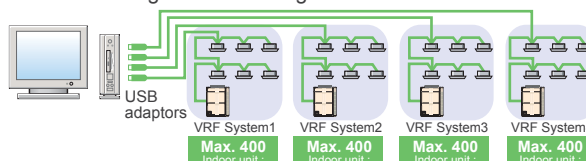
1,600
indoor units
can be supported

Web Monitoring System



Support 4 VRF system

- USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units.
- Suitable for large-scale buildings or hotels.



*1:USB of internet mail system required.

Specifications

Model name	UTR-YSTC / UTY-ASGX		UTR-YMSA / UTY-AMGX	
Personal Computer	AT compatible machine that runs Microsoft® Windows®			
Operating System	Microsoft® Windows® 2000 Professional (English version / Service pack4 or later), XP Professional (English version / Service pack2 or later) Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition. (English version)			
CPU	Intel® Pentium® / Celeron®, AMD Athlon™ / Duron™ 1GHz or higher			
HDD	4.1 GB or more of free space			
Memory	1GB (Vista) , 512MB (XP/2000) or more		1GB or more	
Interface	USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network)		USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network) Ethernet port is required for remote connection using internet.	
Software	Internet Explorer 6.0 or later / Adobe® Acrobat® Reader 4.0 or later			
Hardware	USB Adaptor is U10 USB Network interface of Echelon® corporation.			

PACKING LIST

Packing List	CD-ROM / Wibu Key
--------------	-------------------

Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number: 75010R

Optional Parts

Controllers

System Controller



UTY-APGX

Touch Panel Controller



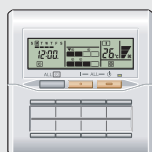
UTY-DTGY

Central Remote Controller



UTB-YCA

Group Remote Controller



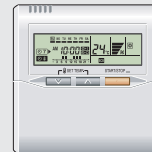
UTB-YDB/UTY-CGGY

Wired Remote Controller



UTB-YUD

Wired Remote Controller



UTB-YUB/UTY-RNKY

Simple Remote Controller



UTB-YPB/UTY-RSKY
With master control

Simple Remote Controller



UTB-YRA/UTY-RHKY
Without master control

Wireless Remote Controller



UTB-YVB

Wireless Remote Controller



UTB-YNA/UTY-LNHY

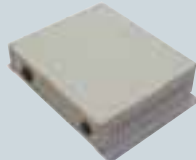
Adaptors/Convertors

Transmission Adaptor



UTR-YTMA/UTR-YTMB

Network Converter



UTR-YRDA/UTR-YGCA/UTY-VGGX

Network Converter for LONWORKS®



UTR-YLLA/UTY-VLGX

BACnet® Gateway

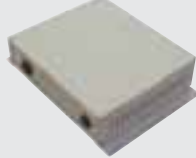


CD-ROM (Software)

Software
Protection Key

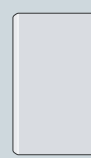
UTR-YLBA/UTY-ABGX

Signal Amplifier



UTR-YRPC/UTY-VSGX

External Switch Controller

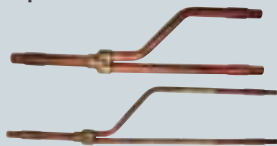


UTR-YESA/UTY-TEKX

Connection Units

Separation Tube

For 3-phase simultaneous multi



UTP-SX236A

Separation Tube

For 3-phase simultaneous multi



UTP-SX254A

Separation Tube

For 3-phase simultaneous multi



UTP-SX354A

Separation Tube

For J series

Separation tubes are available for installation as necessary.

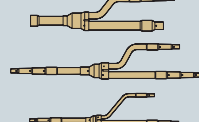


UTR-BP54U/UTR-BP054X

Separation Tube

For S series

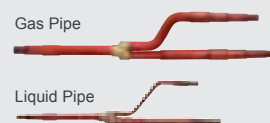
Separation tubes are available for installation as necessary.



UTR-BP54MA/UTR-BP90MA

Separation Tube

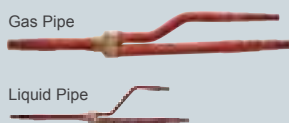
For V and V-II Series



UTR-BP090X

Separation Tube

For V and V-II Series



UTR-BP180X

Separation Tube

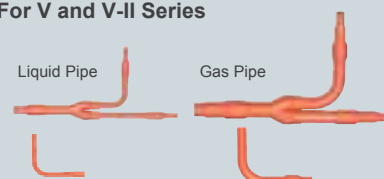
For V and V-II Series



UTR-BP567X

Outdoor Unit Branch Kit

For V and V-II Series



UTR-CP567X

RB (Refrigerant Branch) Unit

For S series

Single type



UTF-Y54A1A

RB (Refrigerant Branch) Unit

For S series

Multi type



UTF-Y90A4A

Header

For J series

Headers are available for installation as necessary.



UTR-HD546U

Header

For S series

Headers are available for installation as necessary.
*Reducer is attached to each header kit.



UTR-HD906R

Header

For S series

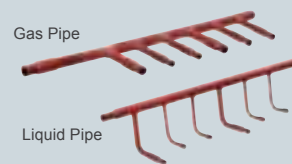
Headers are available for installation as necessary.
*Reducer is attached to each header kit.



UTR-HD908R

Header

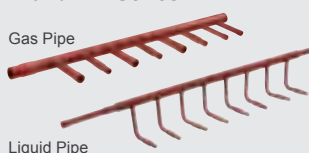
For V and V-II Series



UTR-H0906L/UTR-H1806L

Header

For V and V-II Series

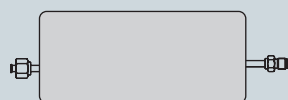


UTR-HD908L/UTR-H1808L

EV Kit

For J series

EV kit is available for installation as necessary.



UTR-EV2AXL/UTR-EV3XL

Optional Parts

Others

For Duct type

Flange(Round)



UTD-RF204

Flange(Square)



UTD-SF045T

Long-Life Filter



UTD-LF25NA

Long-Life Filter



UTD-LF60KA

Drain Pump Unit



UTZ-PX1BBA/UTZ-PX1NBA

IR Receiver Unit



UTY-LRHY1/UTB-YWA/UTB-YWB

Remote Sensor Unit

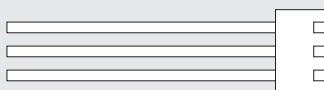
New amenity space can be offered by installing the Remote sensor in the remote controller.



UTD-RS100

External Control Set

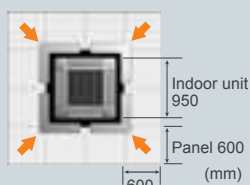
Use to connect with various peripheral devices and air conditioner PC board.



UTD-ECS5A

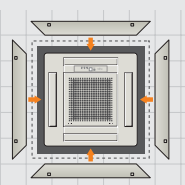
For Cassette type

Wide Panel



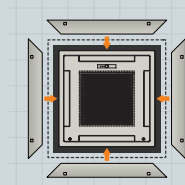
UTG-AGYA-W

Additional Grille



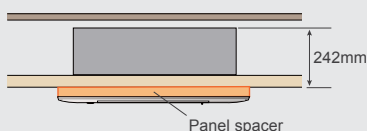
UTG-AGDA-W

Additional Grille



UTG-AGEA-W

Panel Spacer



UTG-BGYA-W

Air Outlet Shutter Plate

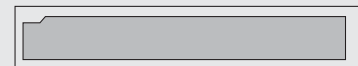
Shuts the air outlet when only using as 2 or 3 blow out.



UTR-YDZE

Air Outlet Shutter Plate

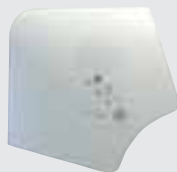
Shuts the air outlet when only using as 2 or 3 blow out.



UTR-YDZD

IR Receiver Kit

UTY-LRHYA1

IR Receiver Kit

UTY-LRHYB1

Grille Kit

UTG-UDYD-W

Grille Kit

UTG-UFYC-W

Grille Kit

UTG-UGYA-W

For Ceiling type**Drain Pump Unit**

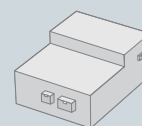
UTR-DPB24T

For Floor type**Half Concealed Kit**

This kit is used to half conceal floor type indoor unit into the wall.



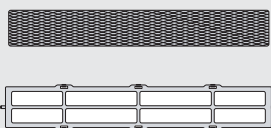
UTR-STA

For Wall Mounted type and Floor type**External Indication Kit**

UTY-XWZX

For Wall Mounted type**Air Clean Filter**

Air clean filter assembly for initial setting.



UTR-FA08

Air Clean Filter

UTR-FB03

EV Kit

For without EV Kit model
(V and V-II series)



UTR-EV09XA/UTR-EV14XA/
UTR-EV09XB/UTR-EV14XB

Sub Interface Board

UTY-XCBXE